

BOBBY JINDAL
GOVERNOR



HAROLD LEGGETT, PH.D.
SECRETARY

State of Louisiana
DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

Certified Mail No.

Activity No.: PER20040001
Agency Interest No. 83613

Robert Hicks
Entergy Services, LLC
Parkwood Two Bldg.
10055 Grogans Mill Rd MU T-PKWD-4
The Woodlands, TX 77380

RE: Part 70 Operating Permit Renewal/Modification, Ouachita Power Generating Plant,
Entergy Arkansas, Inc., Sterlington, Ouachita Parish, Louisiana

Dear Mr. Hicks:

This is to inform you that the permit renewal/modification for the above referenced facility has been approved under LAC 33:III.501. The permit is both a state preconstruction and Part 70 Operating Permit. The submittal was approved on the basis of the emissions reported and the approval in no way guarantees the design scheme presented will be capable of controlling the emissions as to the types and quantities stated. A new application must be submitted if the reported emissions are exceeded after operations begin. The synopsis, data sheets and conditions are attached herewith.

It will be considered a violation of the permit if all proposed control measures and/or equipment are not installed and properly operated and maintained as specified in the application.

Operation of this facility is hereby authorized under the terms and conditions of this permit. This authorization shall expire at midnight on the _____ of _____, 2014, unless a timely and complete renewal application has been submitted six months prior to expiration. Terms and conditions of this permit shall remain in effect until such time as the permitting authority takes final action on the application for permit renewal. The permit number and Agency Interest No. cited above should be referenced in future correspondence regarding this facility.

Please be advised that pursuant to provisions of the Environmental Quality Act and the Administrative Procedure Act, the Department may initiate review of a permit during its term. However, before it takes any action to modify, suspend or revoke a permit, the Department shall, in accordance with applicable statutes and regulations, notify the permittee by mail of the facts or operational conduct that warrant the intended action and provide the permittee with the opportunity to demonstrate compliance with all lawful requirements for the retention of the effective permit.

Done this _____ day of _____, 2009.

Permit No.: 2160-00111-V1

Sincerely,

Cheryl Sonnier Nolan
Assistant Secretary

CSN:dcd

**AIR PERMIT BRIEFING SHEET
PERMITS DIVISION
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY**

**Ouachita Power Generating Plant
Agency Interest No.: 83613
Entergy Arkansas, Inc.
Sterlington, Ouachita Parish, Louisiana**

I. Background

Entergy Arkansas, Inc. owns and operates an electric power generation plant near Sterlington in Ouachita Parish. The plant, known as the Ouachita Power Generating Plant, has been in operation since 2001. The Ouachita Power Generating Plant has a capacity of 815 megawatts. The facility operates under Permits No.: 2160-00111-V0, issued on June 21, 2000; PSD-LA-651, issued on June 20, 2000; and 2160-00111-IV0, issued on July 24, 2000.

This is the Part 70 operating permit renewal for the facility.

II. Origin

A permit application and Emission Inventory Questionnaire was submitted by Ouachita Power LLC on December 14, 2004 requesting a Part 70 operating permit renewal. Additional information dated September 13, 2006, February 7, 2008, and February 12, 2009, was also received.

III. Description

The Ouachita Power Generating Plant consists of three natural gas-fired combustion turbine combined-cycle power units and support equipment. The Ouachita Power Generating Plant generates electricity to meet market conditions for electricity demand. Each combined-cycle unit consists of a combustion turbine/generator exhausting to a heat recovery steam generator equipped with duct burners, where the waste heat in exhaust gas is used to generate steam used to drive a steam turbine/generator. The nominal generating capacity of the entire facility from fuel firing and steam recovery is 815 megawatts (MW).

Each combined-cycle unit consists of one General Electric PG7241FA gas turbine. The turbine generator consists of an air compressor, fuel system, power turbine, and a 60-hertz, 18-kilovolt generator. The turbine operates on natural gas only. The unit operates on demand with loads ranging from 75% to 100% after the startup cycle is completed. The primary emissions from the turbine consist of NO_x, CO, SO₂, PM₁₀, and VOC. The turbine is equipped with General Electric advanced dry low-NO_x combustors (DLN III). A selective catalytic reduction (SCR) system, using aqueous ammonia as a reducing reagent, further controls emissions of NO_x. Sulfur Dioxide emissions are controlled by the use of pipeline quality natural gas. Emissions of particulate matter and volatile organic compound emissions are minimized by the use of fuels with low ash contents and optimization of combustion parameters to provide for complete combustion. Combustion gases from the combustion turbine/HRSG are discharged to the atmosphere through an 18 foot diameter, 150 foot tall stack.

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A supplementary-fired horizontal, natural circulation, three-pressure, heat recovery steam generator (HRSG) extracts heat from the turbine exhaust gas. The HRSG generates steam for power generation and heat for feed water. The HRSG produces high-pressure steam, intermediate-pressure steam, and low-pressure steam for power generation. The HRSG powers a triple-admission, reheat condensing steam turbine. The catalyst bed for NO_x emissions is located within the HRSG.

The Ouachita Power Generating Plant has one natural gas-fired startup boiler. The boiler provides steam to the steam turbine gland seals during preheating and turbine startup operations and is equipped with low NO_x burners. Each combustion turbine has a natural gas-fired indirect water bath heater, manufactured by NATCO, incorporating low NO_x burners. These heaters are used to heat a water and anti-freeze solution that heats the natural gas to 70° F before it enters the main turbine. The plant also uses an emergency powered generator, an emergency fire pump, and cooling towers.

Permit No. PSD-LA-651(M-1) does not authorize any additional construction or any changes in actual emissions beyond those allowed by PSD-LA-651. PSD-LA-651(M-1) authorizes maximum emission rates of nitrogen oxides and carbon monoxide, in pounds per hour, that apply during startup and shutdown of the Combustion Turbines (CTG01, CTG02, and CTG03). All emissions sources at this facility are required to continue to comply with all existing annual emission rates for all pollutants.

Further, PSD-LA-651(M-1) authorizes a revision to the NO_x and CO lb/hr and TPY emission rates for the Combined Cycle Units. Previously, these rates were 46.0 lb/hr and 201.0 TPY of NO_x as well as 61.0 lb/hr and 267.0 TPY of CO. When these rates were originally established, the underlying calculations did not account for the fact that the vendor guarantees at 100% load were lower than the emission rate relied upon in the emission calculation. Using the vendor guarantees, the NO_x emission rates were revised to 43.50 lb/hr and 190.53 TPY. The CO emission rates were revised to 58.00 lb/hr and 254.04 TPY. This results in a decrease in permitted emissions of NO_x and CO. Further PSD review is not required since this change results in a reduction in permitted emissions. This change does not represent a physical change or a change in the method of operation.

Lastly, PSD-LA-651(M-1) revises the particulate matter emission limitations that apply to the cooling towers (CT1 – CT3) to indicate that the limits apply to PM₁₀ and not total suspended particulate.

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**Ouachita Power Generating Plant
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Sterlington, Ouachita Parish, Louisiana**

With this modification, Ouachita Power Generating Plant proposes to:

- Renew its Part 70 permit;
- Rename the ammonia tanks to indicate that they contain 28% aqueous ammonia and not 50% aqueous ammonia;
- Recalculate the particulate emissions from the cooling towers such that all particulate emissions are considered to be PM₁₀, instead of total suspended particulate;
- Incorporate startup and shutdown emissions into the permit; and
- Correct errors in the calculations used to establish the NOx and CO emission rates that were determined as BACT. This correction will result in a decrease in permitted emissions.

Estimated emissions in tons per year are as follows:

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
PM ₁₀	316.07	442.01	+ 125.94**
SO ₂	151.79	151.38	- 0.41
NO _x	614.28	579.32	- 34.96
CO	813.96	769.19	- 44.77
VOC *	96.62	96.54	- 0.08

<u>*VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):</u>	<u>Non-VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):</u>
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Formaldehyde	1.989	Ammonia	293.292
		Sulfuric Acid	0.003
Total	1.989		293.295

Other VOC (TPY): 94.29

** Emission change due to difference in calculation methodology. In Permit No. 2160-00111-V0, the particulate emissions from the Cooling Towers (EQTs 7 – 9) were considered to be total suspended particulate and were calculated separately from PM₁₀. In this permit, the emissions from the cooling towers are considered to be PM₁₀. If the emissions from each of the cooling towers are added to the PM₁₀ "Before" value above, the result is 442.37 tons per year. This represents a permitted decrease of 0.36 tons per year.

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IV. Type of Review

This permit was reviewed for compliance with 40 CFR 70, the Louisiana Air Quality Regulations and Prevention of Significant Deterioration (PSD). New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) do not apply.

This facility is a major source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51. Ammonia (Class III) is emitted in an amount that exceeds the major source threshold. Ammonia (Class III) and Formaldehyde (Class I) are emitted in amounts that are in excess of their respective Minimum Emission Rates (MER).

TAP emissions are emitted by nine point sources at this facility: Combined Cycle Combustion Turbine Unit 1 (EQT 1), Combined Cycle Combustion Turbine Unit 2 (EQT 2), Combined Cycle Combustion Turbine Unit 3 (EQT 3), Fuel Heater 1 (EQT 4), Fuel Heater 2 (EQT 5), Fuel Heater 3 (EQT 6), Diesel Firewater Pump (EQT 10), Auxiliary Boiler (EQT 12), Diesel Emergency Generator (EQT 14). Electric utility steam-generating units (EUSGUs) are not required to incorporate Maximum Achievable Control Technology (MACT) per LAC 33:III.5105.B.2. EQT 4, EQT 5, and EQT 6 are EUSGUs and are therefore not subject to the requirements of MACT. Emissions from the combustion of Group 1 virgin fossil fuels are exempt from the requirement to address MACT per LAC 33:III.5105.B.3.a. Formaldehyde emissions from EQTs 1-3 and EQT 12 are generated by combustion of natural gas, a Group 1 virgin fossil fuel, and are exempted from the requirement to address MACT. Formaldehyde emissions from EQT 10 and EQT 14 are generated by combustion of natural gas, a Group 1 virgin fossil fuel, and are exempted from the requirement to address MACT. MACT is not required for emissions of any Class III TAP, such as ammonia.

V. Credible Evidence

Notwithstanding any other provisions of any applicable rule or regulation or requirement of this permit that state specific methods that may be used to assess compliance with applicable requirements, pursuant to 40 CFR Part 70 and EPA's Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997), any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed shall be considered for purposes of Title V compliance certifications. Furthermore, for purposes of establishing whether or not a person has violated or is in violation of any emissions limitation or standard or permit

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condition, nothing in this permit shall preclude the use, including the exclusive use, by any person of any such credible evidence or information.

VI. Public Notice

A notice requesting public comment on the permit was published in *The Advocate*, Baton Rouge, on <date>, 2006; and in the <local paper>, <local town>, on <date>, 2006. A copy of the public notice was mailed to concerned citizens listed in the Office of Environmental Services Public Notice Mailing List on <date>. The draft permit was also submitted to US EPA Region VI on <date>. All comments will be considered prior to the final permit decision.

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VII. Effects on Ambient Air

Dispersion Model Used: AERMOD

Pollutant	Time Period	Calculated Maximum Ground Level Concentration	Louisiana Toxic Air Pollutant Ambient Air Quality Standard or (National Ambient Air Quality Standard {NAAQS})
PM	24-hour	122.70 $\mu\text{g}/\text{m}^3$	(150 $\mu\text{g}/\text{m}^3$)
	Annual	27.18 $\mu\text{g}/\text{m}^3$	(50 $\mu\text{g}/\text{m}^3$)

VIII. General Condition XVII Activities

None

IX. Insignificant Activities

ID No.:	Description	Citation
-	Fire Water Pump Diesel Fuel Tank (360 gallons)	LAC 33:III.501.B.5.A.3
-	Diesel Generator Diesel Fuel Tank (800 gallons)	LAC 33:III.501.B.5.A.3
-	Sodium Hypochlorite Tank (10,000 gallons)	LAC 33:III.501.B.5.A.4
-	Sodium Hydroxide Tank (2,000 gallons)	LAC 33:III.501.B.5.A.10
-	Sodium Hydroxide Tank (5,500 gallons)	LAC 33:III.501.B.5.A.10
-	Lube Oil Tanks for Gas Turbines (3) (6,200 gallons each)	LAC 33:III.501.B.5.A.3
-	Lube Oil Tanks for Steam Turbines (3) (4,500 gallons each)	LAC 33:III.501.B.5.A.3
-	Hydraulic Oil Tanks for Steam Turbines (3) (150 gallons each)	LAC 33:III.501.B.5.A.2

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X. Table 1. Applicable Louisiana and Federal Air Quality Requirements

ID No.:	Description	LAC 33:III.Chapter										NSPS 40 CFR 60						NESHAP 40 CFR 63						40 CFR							
		2	5▲	9	11	13	15	21	22	51*	56	59	A	Da	Dc	GG	III	A	Q	YYYY	ZZZZ	52	64	68	72	73	75	76	77	78	
UNF001	Facility Wide	1	1	1	1	1	1	1	1	2	1	3	1									1	2	3							
PCS001	Combined Cycle Combustion Turbine w/HRSG and Duct Burners Unit 1			1		1																	1								
PCS002	Combined Cycle Combustion Turbine w/HRSG and Duct Burners Unit 2			1		1																	1								
PCS003	Combined Cycle Combustion Turbine w/HRSG and Duct Burners Unit 3			1		1																	1								
EQT001	CTG01 Combined Cycle Combustion Turbine Unit 1			1		1		2			1		1								3		1		1	1					
EQT002	CTG02 Combined Cycle Combustion Turbine Unit 2			1		1		2			1		1							3		1		1	1						
EQT003	CTG03 Combined Cycle Combustion Turbine Unit 3			1		1		2			1		1							3		1		1	1						
EQT004	HTR01 Fuel Heater 1			1		1																	1								
EQT005	HTR02 Fuel Heater 2			1		1																	1								
EQT006	HTR03 Fuel Heater 3			1		1																	1								
EQT007	CT1 Cooling Tower 1			1																		3		1							
EQT008	CT2 Cooling Tower 2			1																		3		1							
EQT009	CT3 Cooling Tower 3			1																		3		1							
EQT010	DFP Diesel Firewater Pump			1		1		1													3		1								

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		2	5▲	9	11	13	15	21	22	51*	56	59	A	Da	Dc	GG	HII	A	Q	YYYY	ZZZZ	52	64	68	72	73	75	76	77
EQT012	SUB Auxiliary Boiler												1	1															
EQT013	TK1 Sulfuric Acid Tank																												
EQT014	DG Diesel Emergency Generator																												
EQT015	TK2 - 50% Aqueous Ammonia Tank No. 1																												
EQT016	TK3 - 50% Aqueous Ammonia Tank No. 2																												
EQT017	TK4 - 50% Aqueous Ammonia Tank No. 3																												
EQT018	DB01 - Duct Burners Unit 1																												
EQT019	DB02 - Duct Burners Unit 2																												
EQT020	DB03 - Duct Burners Unit 3																												

* The regulations indicated above are State Only regulations.

▲ All LAC 33:III Chapter 5 citations are federally enforceable including LAC 33:III.501.C.6 citations, except when the requirement found in the "Specific Requirements" report specifically states that the regulation is State Only.

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

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KEY TO MATRIX

- 1 -The regulations have applicable requirements that apply to this particular emission source.
-The emission source may have an exemption from control stated in the regulation. The emission source may not have to be controlled but may have monitoring, recordkeeping, or reporting requirements.
- 2 -The regulations have applicable requirements that apply to this particular emission source but the source is currently exempt from these requirements due to meeting a specific criterion, such as it has not been constructed, modified or reconstructed since the regulations have been in place. If the specific criteria changes the source will have to comply at a future date.
- 3 -The regulations apply to this general type of emission source (i.e. vents, furnaces, towers, and fugitives) but do not apply to this particular emission source.

Blank – The regulations clearly do not apply to this type of emission source.

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XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
	Chemical Accident Prevention and Minimization of Consequences [LAC 33:III.5901]	DOES NOT APPLY. The Ouachita Power Generating Plant contains no sources which produce, handle, process, or store substances listed in LAC 5907.A Table A in quantities greater than the listed threshold.
UNF001	Compliance Assurance Monitoring [40 Part 64.2(b)(1)(iii)]	EXEMPT. The Ouachita Power Generating Plant is subject to Acid Rain requirements. [40 CFR 64.2(b)(ii)]
	Chemical Accident Prevention Provisions [40 CFR 68]	DOES NOT APPLY. The Ouachita Power Generating Plant contains no sources which produce, handle, process, or store substances listed in 40 CFR 68.130 in quantities greater than the listed threshold.
EQT001, EQT002, EQT003	Comprehensive Toxic Air Pollutant Emission Control Program [LAC 33:III.5105.B.2]	EXEMPT. MACT is not required for emissions of Ammonia, a Class III TAP. [LAC 5109.A.1] Formaldehyde emissions result from the combustion of natural gas, a Group 1 Virgin Fossil Fuel. [LAC 33:III.5105.B.3.a]
	NESHAP Subpart YYYYY - National Emission Standard for Hazardous Air Pollutants for Stationary Combustion Turbines	DOES NOT APPLY. Turbines are not located at a major source of HAPs. [40 CFR 63.6080]
	NESHAP Subpart Q - National Emission Standards for Hazardous Air Pollutants for Industrial Cooling Towers [40 CFR 63.400(a)]	DOES NOT APPLY. The Ouachita Power Generating Plant does not use chromium based water treatment chemicals in the cooling water or cooling tower.
EQT007, EQT008, EQT009	NSPS III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	DOES NOT APPLY. Engines were constructed in June 2002. [40 CFR 63.4200(3)(2)]
EQT012, EQT014	NESHAP ZZZZ - National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines Storage of Volatile Organic Compounds [LAC 33:III.2103]	DOES NOT APPLY. Engine is an existing compression ignition stationary reciprocating internal combustion engine. [40 CFR 63.6590(b)(3)] DOES NOT APPLY. Tanks do not store any volatile organic compounds. [LAC 33:III.2103.A]
EQT015, EQT016, EQT017	Comprehensive Toxic Air Pollutant Emission Control Program	EXEMPT. Sources are electric utility steam-generating units. [LAC 33:III.5105.B.2]
EQT018, EQT019, EQT020		

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

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XI. Table 2. Explanation for Exemption Status or Non-Applicability of a Source

ID No:	Requirement	Notes
PCS001	Control of Emissions of Sulfur Dioxide [LAC 33:III.1503]	EXEMPT. Sources emit less than 100 TPY of SO ₂ . Permittee shall maintain records showing annual potential SO ₂ emissions. [LAC 33:II.1513.C]
PCS002		
PCS003		

The above table provides explanation for either the exemption status or non-applicability of a source cited by 1, 2 or 3 in the matrix presented in Section X (Table 1) of this permit.

General Information

AI ID: 83613 Entergy Arkansas Inc - Ouachita Power Generating Plant
Activity Number: PER2004001
Permit Number: 2160-00111-V1
Air - Title V Regular Permit Renewal

Also Known As:	ID	Name	User Group	Start Date
	2160-00111	Entergy Arkansas Inc - Ouachita Power Generating Plant	CDS Number	12-14-1999
LAR000048744		Ouchita Power LLC	Hazardous Waste Notification	03-15-2002
LA0112780		LPDES #	LPDES Permit #	06-25-2003
LAR05N587		LPOES #	LPDES Permit #	12-12-2004
LAR05P052		LPDES #	LPDES Permit #	01-28-2009
		Energy Louisiana LLC (ELL) - Energy Arkansas Inc - Ouachita Power Generating Plant	Multimedia	09-30-2008
		Entergy Arkansas Inc (owner)	Multimedia	09-30-2008
		Entergy Louisiana LLC (ELL) (operator)	Multimedia	09-30-2008
55467		ORIS Code	ORIS Code	09-16-2008
		Priority 2 Emergency Site	Priority 2 Emergency Site	07-25-2006
G-073-11716		Facility #	Solid Waste Facility No.	11-04-2002
		Ouachita Power Project-National Energy Production Co (NEPCO)	Water Permitting	11-16-2000
Physical Location:		350 Harvey Gregg Rd Sterlington, LA 71280	Main FAX: 3186653232 Main Phone: 3186653203	
Mailing Address:		11140 Hwy 165 N Sterlington, LA 70113		
Location of Front Gate:		32° 42' 28" latitude, 92° 4' 13" longitude, Coordinate Method: Lat. Long. - DMS, Coordinate Datum: NAD83		
Related People:	Name	Mailing Address	Phone (Type)	Relationship
	Gary Allard	PO Box 1288 Sterlington, LA 71280	3186652992 (WP)	Air Designated Representative for
	Ron Cernigliaro	PO Box 1228 Sterlington, LA 71280	rce@entergy.com	Haz. Waste Billing Party for
	Ron Cernigliaro	PO Box 647 Sterlington, LA 701280647	3186653203 (WP)	Air Permit Contact For
	Ron Cernigliaro	PO Box 647 Sterlington, LA 701280647	3186653232 (WF)	Air Permit Contact For
	Ron Cernigliaro	PO Box 647 Sterlington, LA 701280647	4254153000 (WF)	Air Permit Contact For
	Glen Griswold	1183 N Creek Parkway N Bothell, WA 98011	2812973428 (WP)	Water Permit Contact For
	Robert Hicks	446 North Blvd L-NORT-3A Baton Rouge, LA 70802		Responsible Official for
Related Organizations:	Name	Address	Phone (Type)	Relationship
Cogentrix		350 Harvey Gregg Rd Sterlington, LA 71280	3186652992 (WP)	Owns
Cogentrix		350 Harvey Gregg Rd Sterlington, LA 71280	3186652992 (WP)	Emission Inventory Billing Party
Energy Arkansas Inc		639 Loyola Avenue (L-ENT-5E) New Orleans, LA 70113	5045766936 (WP)	Owns
Energy Arkansas Inc		639 Loyola Avenue (L-ENT-5E) New Orleans, LA 70113	5045767050 (WF)	Owns
Energy Louisiana LLC (ELL)		11140 Hwy 165 N Sterlington, LA 71280	3186652069 (WF)	Air Billing Party for

General Information

AI ID: 83613 Entergy Arkansas Inc - Ouachita Power Generating Plant

Activity Number: PER2004001

Permit Number: 2160-00111-V1

Air - Title V Regular Permit Renewal

Related Organizations:	Name	Address	Phone (Type)	Relationship
	Entergy Louisiana LLC (ELL)	11140 Hwy 165 N Sterlington, LA 71280	3186552331 (WP)	Operates
	Entergy Louisiana LLC (ELL)	11140 Hwy 165 N Sterlington, LA 71280	3186552069 (WF)	Operates
	Entergy Louisiana LLC (ELL)	11140 Hwy 165 N Sterlington, LA 71280	3186552331 (WP)	Air Billing Party for
	Quachita Power LLC	9405 Arrow Point Blvd Charlotte, NC 28273	7045253800 (WP)	Water Billing Party for

Note: This report entitled "General Information" contains a summary of facility-level information contained in LDEQ's TEMPO database for this facility and is not considered a part of the permit. Please review the information contained in this document for accuracy and completeness. If any changes are required or if you have questions regarding this document, you may contact Mr. David Ferrand, Environmental Assistance Division, at (225) 218-0775 or email your changes to facupdate@la.gov.

INVENTORIES

AI ID: 83613 - Entergy Arkansas Inc - Ouachita Power Generating Plant
Activity Number: PER20040001
Permit Number: 2160-00111-V1
Air - Title V Regular Permit Renewal

Subject Item Inventory:

ID	Description	Tank Volume	Max. Operating Rate	Normal Operating Rate	Contents	Operating Time
Combined Cycle Combustion Turbine Generator/HRSG w/Duct Burner Unit 1						
EQT 0001	CTG01 - Combustion Turbine Unit 1		1998 MM BTU/hr	1998 MM BTU/hr		8760 hr/yr
EQT 0018	DB01 - Duct Burners Unit 1		261.96 MM BTU/hr	261.96 MM BTU/hr		8760 hr/yr
Combined Cycle Combustion Turbine Generator/HRSG w/Duct Burner Unit 2						
EQT 0002	CTG02 - Combustion Turbine Unit 2		1998 MM BTU/hr	1998 MM BTU/hr		8760 hr/yr
EQT 0019	DB02 - Duct Burners Unit 2		261.96 MM BTU/hr	261.96 MM BTU/hr		8760 hr/yr
Combined Cycle Combustion Turbine Generator/HRSG w/Duct Burner Unit 3						
EQT 0003	CTG03 - Combustion Turbine Unit 3		1998 MM BTU/hr	1998 MM BTU/hr		8760 hr/yr
EQT 0020	DB03 - Duct Burners Unit 3		261.96 MM BTU/hr	261.96 MM BTU/hr		8760 hr/yr
Entire Facility						
EQT 0004	HTR01 - Fuel Heater 1	3 MM BTU/hr				8760 hr/yr
EQT 0005	HTR02 - Fuel Heater 2	3 MM BTU/hr				8760 hr/yr
EQT 0006	HTR03 - Fuel Heater 3	3 MM BTU/hr				8760 hr/yr
EQT 0007	CT1 - Cooling Tower 1	80000 gallons/min				8760 hr/yr
EQT 0008	CT2 - Cooling Tower 2	80000 gallons/min				8760 hr/yr
EQT 0009	CT3 - Cooling Tower 3	80000 gallons/min				8760 hr/yr
EQT 0010	DFP - Diesel Firewater Pump	240 horsepower				500 hr/yr
EQT 0012	SUB - Auxiliary Boiler	25.1 MM BTU/hr				3000 hr/yr
EQT 0013	TK1 - Sulfuric Acid Tank	4500 gallons	217 gallons/day			8760 hr/yr
EQT 0014	DG - Diesel Emergency Generator	1109 horsepower				500 hr/yr
EQT 0015	TK2 - 28% Aqueous Ammonia Tank No. 1	3000 gallons			Aqueous Ammonia	8760 hr/yr
EQT 0016	TK3 - 28% Aqueous Ammonia Tank No. 2	3000 gallons			Aqueous Ammonia	8760 hr/yr
EQT 0017	TK4 - 28% Aqueous Ammonia Tank No. 3	3000 gallons			Aqueous Ammonia	8760 hr/yr
Stack Information:						
ID	Description	Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)
Combined Cycle Combustion Turbine Generator/HRSG w/Duct Burner Unit 1						
EQT 0001	CTG01 - Combustion Turbine Unit 1	70		18		150
EQT 0018	DB01 - Duct Burners Unit 1	70	1100000		18	150
Combined Cycle Combustion Turbine Generator/HRSG w/Duct Burner Unit 2						
EQT 0002	CTG02 - Combustion Turbine Unit 2	70		18		150
EQT 0019	DB02 - Duct Burners Unit 2	70	1100000		18	150

INVENTORIES

AI ID: 83613 - Entergy Arkansas Inc - Ouachita Power Generating Plant
 Activity Number: PER20040001
 Permit Number: 2160-00111-V1
 Air - Title V Regular Permit Renewal

Stack Information:

ID	Description	Velocity (ft/sec)	Flow Rate (cubic ft/min-actual)	Diameter (feet)	Discharge Area (square feet)	Height (feet)	Temperature (°F)
Combined Cycle Combustion Turbine Generator/HRSG w/Duct Burner Unit 3							
EQT 0003	CTG03 - Combustion Turbine Unit 3	70		18		150	190
EQT 0020	DB03 - Duct Burners Unit 3	70	1100000	18		150	190
Entire Facility							
EQT 0004	HTR01 - Fuel Heater 1	16	3000	2		100	980
EQT 0005	HTR02 - Fuel Heater 2	16	3000	2		100	980
EQT 0006	HTR03 - Fuel Heater 3	16	3000	2		100	980
EQT 0007	CT1 - Cooling Tower 1	7.6	391000	33		35	90
EQT 0008	CT2 - Cooling Tower 2	7.6	391000	33		35	90
EQT 0009	CT3 - Cooling Tower 3	7.6	391000	33		35	90
EQT 0010	DFP - Diesel Firewater Pump	66.4	1404	.67		82	840
EQT 0012	SUB - Auxiliary Boiler	52.5	9890	2		83	516
EQT 0013	TK1 - Sulfuric Acid Tank					15	
EQT 0014	DG - Diesel Emergency Generator			.67		16.4	840

Relationships:

Subject Item Groups:

ID	Group Type	Group Description
GRP 0002	Equipment Group	ARS - Acid Rain Sources
PCS 0001	Process Group	Comb. Cycle Unit 1 - Combined Cycle Combustion Turbine Generator/HRSG w/Duct Burner Unit 1
PCS 0002	Process Group	Comb. Cycle Unit 2 - Combined Cycle Combustion Turbine Generator/HRSG w/Duct Burner Unit 2
PCS 0003	Process Group	Comb. Cycle Unit 3 - Combined Cycle Combustion Turbine Generator/HRSG w/Duct Burner Unit 3
SCN 0001	Alternate Operating Scenario	SUSD Unit 1 - Unit 1 Startup/Shutdown
SCN 0002	Alternate Operating Scenario	SUSD Unit 2 - Unit 2 Startup/Shutdown
SCN 0003	Alternate Operating Scenario	SUSD Unit 3 - Unit 3 Startup/Shutdown
SCN 0004	Alternate Operating Scenario	CTG01 Simple Cycle - Combustion Turbine Unit 1 - Simple Cycle
SCN 0005	Alternate Operating Scenario	CTG02 Simple Cycle - Combustion Turbine Unit 2 - Simple Cycle
SCN 0006	Alternate Operating Scenario	CTG03 Simple Cycle - Combustion Turbine Unit 3 - Simple Cycle
SCN 0007	Alternate Operating Scenario	DB01 Comb. Cycle - Duct Burners Unit 1 - Combined Cycle
SCN 0008	Alternate Operating Scenario	DB02 Comb. Cycle - Duct Burners Unit 2 - Combined Cycle
SCN 0009	Alternate Operating Scenario	DB03 Comb. Cycle - Duct Burners Unit 3 - Combined Cycle
UNF 0001	Unit or Facility Wide	Entire Facility - Entire Facility

INVENTORIES

AI ID: 83613 - Entergy Arkansas Inc - Ouachita Power Generating Plant
 Activity Number: PER20040001
 Permit Number: 2160-00111-V1
 Air - Title V Regular Permit Renewal

Group Membership:

ID	Description	Member of Groups
EQT 0001	CTG01 - Combustion Turbine Unit 1	GRP0000000002, PCS0000000001, SCN0000000004
EQT 0002	CTG02 - Combustion Turbine Unit 2	GRP0000000002, PCS0000000002, SCN0000000005
EQT 0003	CTG03 - Combustion Turbine Unit 3	GRP0000000002, PCS0000000003, SCN0000000006
EQT 0018	DB01 - Duct Burners Unit 1	PCS0000000001, SCN0000000007
EQT 0019	DB02 - Duct Burners Unit 2	PCS0000000002, SCN0000000008
EQT 0020	DB03 - Duct Burners Unit 3	PCS0000000003, SCN0000000009

NOTE: The UNF group relationship is not printed in this table. Every subject item is a member of the UNF group

Annual Maintenance Fee:

Fee Number	Air Contaminant Source	Multplier	Units Of Measure
1420	1420 C) Electric Power Gen. (Natural Gas Fired) (Rated Capacity)	815	MW

SIC Codes:

4911	Electric services	AI 83613
4911	Electric services	UNF 001

EMISSION RATES FOR CRITERIA POLLUTANTS

AI ID: 83613 - Entergy Arkansas Inc - Ouachita Power Generating Plant

Activity Number: PER20040001

Permit Number: 2160-00111-V1

Air - Title V Regular Permit Renewal

Subject Item	CO			NOx			PM10			SO2			VOC		
	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year	Avg lb/hr	Max lb/hr	Tons/Year
Entire Facility															
EQT 0004	0.24	0.24	1.06	0.09	0.09	0.40	0.02	0.02	0.10	0.002	0.01	0.01	0.01	0.01	0.05
HTR01															
EQT 0005	0.24	0.24	1.06	0.09	0.09	0.40	0.02	0.02	0.10	0.002	0.01	0.01	0.01	0.01	0.05
HTR02															
EQT 0006	0.24	0.24	1.06	0.09	0.09	0.40	0.02	0.02	0.10	0.002	0.01	0.01	0.01	0.01	0.05
HTR03															
EQT 0007										9.61	9.61	42.10			
C71															
EQT 0008										9.61	9.61	42.10			
C72															
EQT 0009										9.61	9.61	42.10			
C73															
EQT 0010	0.17	0.17	0.05	3.90	3.90	0.98	0.04	0.04	0.01	0.39	0.39	0.01	0.13	0.13	0.04
DFP															
EQT 0012	2.02	2.02	3.03	0.77	0.77	1.15	0.18	0.18	0.27	0.01	0.01	0.02	0.13	0.13	0.20
SUB															
EQT 0014	3.20	3.20	0.81	17.50	17.50	4.40	0.52	0.52	0.13	1.70	1.70	0.42	0.60	0.60	0.15
OG															
PCS 0001	58.00	58.00	254.04	43.50	43.50	190.53	24.00	24.00	105.00	11.50	11.50	50.30	7.30	7.30	32.00
Comb. Cycle Unit 1															
PCS 0002	58.00	58.00	254.04	43.50	43.50	190.53	24.00	24.00	105.00	11.50	11.50	50.30	7.30	7.30	32.00
Comb. Cycle Unit 2															
PCS 0003	58.00	58.00	254.04	43.50	43.50	190.53	24.00	24.00	105.00	11.50	11.50	50.30	7.30	7.30	32.00
Comb. Cycle Unit 3															
SCN 0001			2000			200									
SUSD Unit 1			2000			200									
SCN 0002			2000			200									
SUSD Unit 2			2000			200									
SCN 0003			2000			200									
SUSD Unit 3			2000			200									
SCN 0004	28.00	28.00	122.64	46.00	46.00	201.00	9.00	9.00	39.42	9.98	9.98	43.71	7.30	7.30	32.00
CTG01 Simple Cy															
SCN 0005	28.00	28.00	122.64	46.00	46.00	201.00	9.00	9.00	39.42	9.98	9.98	43.71	7.30	7.30	32.00
CTG02 Simple Cy															
SCN 0006	28.00	28.00	122.64	46.00	46.00	201.00	9.00	9.00	39.42	9.98	9.98	43.71	7.30	7.30	32.00
CTG03 Simple Cy															
SCN 0007	33.00	33.00	144.54	4.00	4.00	17.52	5.24	5.24	22.95	1.52	1.52	6.66	1.60	1.60	7.01
DB01 Comb. Cyc															
SCN 0008	33.00	33.00	144.54	4.00	4.00	17.52	5.24	5.24	22.95	1.52	1.52	6.66	1.60	1.60	7.01
DB02 Comb. Cyc															
SCN 0009	33.00	33.00	144.54	4.00	4.00	17.52	5.24	5.24	22.95	1.52	1.52	6.66	1.60	1.60	7.01
DB03 Comb. Cyc															

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals unless otherwise noted in a footnote.

EMISSION RATES FOR TAP/HAP & OTHER POLLUTANTS

AI ID: 83613 - Entergy Arkansas Inc - Ouachita Power Generating Plant

Activity Number: PER20040001

Permit Number: 2160-00111-V1

Air - Title V Regular Permit Renewal

Emission Pt.	Pollutant	Avg lb/hr	Max lb/hr	Tons/Year
EQT 0004 HTR01	Formaldehyde	0.001	0.001	0.001
EQT 0005 HTR02	Formaldehyde	0.001	0.001	0.001
EQT 0006 HTR03	Formaldehyde	0.001	0.001	0.001
EQT 0010 DFP	Formaldehyde	0.002	0.002	0.001
EQT 0012 SUB	Formaldehyde	0.002	0.002	0.003
EQT 0013 TK1	Sulfuric acid	<0.001	0.020	0.003
EQT 0014 DG	Formaldehyde	0.010	0.010	0.002
PCS 0001 Comb. Cycle Unit 1	Ammonia	22.330	22.330	97.764
	Formaldehyde	0.150	0.150	0.660
PCS 0002 Comb. Cycle Unit 2	Ammonia	22.330	22.330	97.764
	Formaldehyde	0.150	0.150	0.660
PCS 0003 Comb. Cycle Unit 3	Ammonia	22.330	22.330	97.764
	Formaldehyde	0.150	0.150	0.660
SCN 0004 CTG01 Simple Cycle	Ammonia	22.300	22.300	97.764
	Formaldehyde	0.130	0.130	0.570
SCN 0005 CTG02 Simple Cycle	Ammonia	22.300	22.300	97.764
	Formaldehyde	0.130	0.130	0.570
SCN 0006 CTG03 Simple Cycle	Ammonia	22.300	22.300	97.764
	Formaldehyde	0.130	0.130	0.570
SCN 0007 DB01 Comb. Cycle	Formaldehyde	0.020	0.020	0.087
SCN 0008 DB02 Comb. Cycle	Formaldehyde	0.020	0.020	0.087
SCN 0009 DB03 Comb. Cycle	Formaldehyde	0.020	0.020	0.087
UNF 0001 Entire Facility	Ammonia			293.292
	Formaldehyde			1.989
	Sulfuric acid			0.003

Note: Emission rates in bold are from alternate scenarios and are not included in permitted totals unless otherwise noted in a footnote. Emission rates attributed to the UNF reflect the sum of the TAP/HAP limits of the individual emission points (or caps) under this permit, but do not constitute an emission cap.

SPECIFIC REQUIREMENTS

AI ID: 83613 - Entergy Arkansas Inc - Ouachita Power Generating Plant
 Activity Number: PER20040001
 Permit Number: 2160-00111-V1
 Air - Title V Regular Permit Renewal

PCS 0001 Comb. Cycle Unit 1 - Combined Cycle Combustion Turbine Generator/HRSG w/Duct Burner Unit 1

Group Members: EQT 0001 EQT 0013

- 1 [LAC 33:II.1101.B] Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).
 Which Months: All Year Statistical Basis: None specified
 Equipment/operational data recordkeeping by electronic or hard copy once initially and annually. Record and retain at the site sufficient data to show annual potential sulfur dioxide emissions.
 Submit report: Due within 60 days after performance/emissions test. Submit emissions test results to the Office of Environmental Assessment. The test results summary shall include any necessary conversion into the units of any applicable Standard. (lbs/MMBTu, g/dscf, lbs SO2 / ton 100% H2SO4, Etc.) Plant and in house laboratory data to support production values shall be included. (Example: how many tons of 100% equivalent H2SO4 was being produced) Units tested at less than 95% of permitted maximum capacity shall provide documentation to support compliance at 100% of the permitted maximum capacity.
 Submit notification: Due at least 30 days prior to any LDEQ required performance/emissions test to the Office of Environmental Assessment, to provide the opportunity to conduct a pretest meeting and observe the emission testing.
 Conduct a performance/emissions test: Due within 5 years, plus or minus 6 months, of when the previous performance test was performed, or within 180 days after the issuance of this permit renewal, whichever comes later. The stack test's purpose is to demonstrate compliance with the emission limits of this permit and therefore must be conducted at greater than 80% of maximum permitted capacity. Test methods and procedures shall be in accordance with New Source Performance Standards, 40 CFR 60, Appendix A, Method 10 - Determination of Carbon Monoxide Emissions from Stationary Sources. Use alternate stack test methods only with the prior approval of the Office of Environmental Assessment, Environmental Technology Division, Engineering Services. As required by LAC 33:III.913, provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits.
 Permittee shall ensure compliance with the opacity and particulate matter emission limits of this permit by visually inspecting this source for opacity on a weekly basis. If visible emissions are detected, then, within three (3) working days, the permittee shall conduct a six minute opacity reading in accordance with EPA Reference Method 9. Records of visible emission checks shall include emission point ID, date visual check was performed, a record if visible emissions were detected, and a record of any Method 9 testing conducted and the results of any Method 9 test. These records shall be kept on site and available for inspection by DEQ personnel.
- 2 [LAC 33:II.1513.C]
- 3 [LAC 33:II.507.H.1.a]
- 4 [LAC 33:II.507.H.1.a]
- 5 [LAC 33:II.507.H.1.a]
- 6 [LAC 33:II.509]
- 7 [LAC 33:II.1101.B] Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).
 Which Months: All Year Statistical Basis: None specified
 Equipment/operational data recordkeeping by electronic or hard copy once initially and annually. Record and retain at the site sufficient data to show annual potential sulfur dioxide emissions.
- 8 [LAC 33:II.1513.C]

SPECIFIC REQUIREMENTS

AI ID: 83613 - Entergy Arkansas Inc - Ouachita Power Generating Plant
Activity Number: PER20040001
Permit Number: 2160-00111-V1
Air - Title V Regular Permit Renewal

PCS 0002 Comb. Cycle Unit 2 - Combined Cycle Combustion Turbine Generator/HRSG w/Duct Burner Unit 2

- 9 [LAC 33:III.507.H.1.a] Conduct a performance/emissions test: Due within 5 years, plus or minus 6 months, of when the previous performance test was performed, or within 180 days after the issuance of this permit renewal, whichever comes later. The stack test's purpose is to demonstrate compliance with the emission limits of this permit and therefore must be conducted at greater than 80% of maximum permitted capacity. Test methods and procedures shall be in accordance with New Source Performance Standards, 40 CFR 60, Appendix A, Method 10 - Determination of Carbon Monoxide Emissions from Stationary Sources. Use alternate stack test methods only with the prior approval of the Office of Environmental Assessment, Environmental Technology Division, Engineering Services. As required by LAC 33.III.913, provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits.
- 10 [LAC 33:III.507.H.1.a] Submit notification: Due at least 30 days prior to any LDEQ required performance/emissions test to the Office of Environmental Assessment, to provide the opportunity to conduct a pretest meeting and observe the emission testing.
- 11 [LAC 33:III.507.H.1.a] Submit report: Due within 60 days after performance/emissions test. Submit emissions test results to the Office of Environmental Assessment. The test results summary shall include any necessary conversion into the units of any applicable Standard. (lbs/MMBtu, gr/dscf, lbs SO₂ / ton 100% H₂SO₄, Etc.) Plant and in house laboratory data to support production values shall be included. (Example: how many tons of 100% equivalent H₂SO₄ was being produced) Units tested at less than 95% of permitted maximum capacity shall provide documentation to support compliance at 100% of the permitted maximum capacity.
- 12 [LAC 33:III.509] Permittee shall ensure compliance with the opacity and particulate matter emission limits of this permit by visually inspecting this source for opacity on a weekly basis. If visible emissions are detected, then, within three (3) working days, the permittee shall conduct a six minute opacity reading in accordance with EPA Reference Method 9. Records of visible emission checks shall include emission point ID, date visual check was performed, a record if visible emissions were detected, and a record of any Method 9 testing conducted and the results of any Method 9 test. These records shall be kept on site and available for inspection by DEQ personnel.
- PCS 0003 Comb. Cycle Unit 3 - Combined Cycle Combustion Turbine Generator/HRSG w/Duct Burner Unit 3**
- Group Members: EQT 0003 EQT 0020
- 13 [LAC 33:III.1101.B] Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).
- 14 [LAC 33:III.1513.C] Which Months: All Year Statistical Basis: None specified Equipment/operational data recordkeeping by electronic or hard copy once initially and annually. Record and retain at the site sufficient data to show annual potential sulfur dioxide emissions.
- 15 [LAC 33:III.507.H.1.a] Submit report: Due within 60 days after performance/emissions test. Submit emissions test results to the Office of Environmental Assessment. The test results summary shall include any necessary conversion into the units of any applicable Standard. (lbs/MMBtu, gr/dscf, lbs SO₂ / ton 100% H₂SO₄, Etc.) Plant and in house laboratory data to support production values shall be included. (Example: how many tons of 100% equivalent H₂SO₄ was being produced) Units tested at less than 95% of permitted maximum capacity shall provide documentation to support compliance at 100% of the permitted maximum capacity.
- 16 [LAC 33:III.507.H.1.a] Submit notification: Due at least 30 days prior to any LDEQ required performance/emissions test to the Office of Environmental Assessment, to provide the opportunity to conduct a pretest meeting and observe the emission testing.

SPECIFIC REQUIREMENTS

AI ID: 83613 - Entergy Arkansas Inc - Ouachita Power Generating Plant

Activity Number: PER20040001

Permit Number: 2160-00111-Y1

Air - Title V Regular Permit Renewal

PCS 0003 Comb. Cycle Unit 3 - Combined Cycle Combustion Turbine Generator/HRSG w/Duct Burner Unit 3

- 17 [LAC 33:III.507.H.1.a] Conduct a performance/emissions test: Due within 5 years, plus or minus 6 months, of when the previous performance test was performed, or within 180 days after the issuance of this permit renewal, whichever comes later. The stack test's purpose is to demonstrate compliance with the emission limits of this permit and therefore must be conducted at greater than 80% of maximum permitted capacity. Test methods and procedures shall be in accordance with New Source Performance Standards, 40 CFR 60, Appendix A, Method 10 - Determination of Carbon Monoxide Emissions from Stationary Sources. Use alternate stack test methods only with the prior approval of the Office of Environmental Assessment, Environmental Technology Division, Engineering Services. As required by LAC 33:III.913, provide necessary sampling ports in stacks or ducts and such other safe and proper sampling and testing facilities for proper determination of the emission limits. Permittee shall ensure compliance with the opacity and particulate matter emission limits of this permit by visually inspecting this source for opacity on a weekly basis. If visible emissions are detected, then, within three (3) working days, the permittee shall conduct a six minute opacity reading in accordance with EPA Reference Method 9. Records of visible emission checks shall include emission point ID, date visual check was performed, a record if visible emissions were detected, and a record of any Method 9 testing conducted and the results of any Method 9 test. These records shall be kept on site and available for inspection by DEQ personnel.
- 18 [LAC 33:III.509]

Group: PCS 0001 Combined Cycle Combustion Turbine Generator/HRSG w/Duct Burner Unit 1

Group Members: EQT 0001 EQT 0018

EQT 0001 CTG01 - Combustion Turbine Unit 1

- 19 [40 CFR 60.332(b)(1)] Nitrogen oxides <= 0.0075 % by volume at 15% oxygen and on a dry basis in gases discharged to the atmosphere. Use analytical methods and procedures that are accurate to within 5 percent and are approved by DEQ to determine the nitrogen content of the fuel being fired per 40 CFR 60.335(a). Subpart GG. [40 CFR 60.332(a)(1)]
- Which Months: All Year Statistical Basis: None specified
- 20 [40 CFR 60.333(b)] Fuel sulfur content <= 0.8 % by weight (8000 ppmw) for any fuel burned. Subpart GG. [40 CFR 60.333(b)]
- Which Months: All Year Statistical Basis: None specified
- 21 [40 CFR 60.334(b)] Oxygen and Nitrogen oxides recordkeeping by continuous emission monitor (CEM) continuously as specified in 40 CFR 60.334(b)(1) through (b)(3). Compliance with all applicable requirements of 40 CFR 75 is determined to be compliance with this specific condition. Subpart GG. [40 CFR 60.334(b)]
- 22 [40 CFR 60.334(b)] Oxygen and Nitrogen oxides monitored by continuous emission monitor (CEM) continuously as specified in 40 CFR 60.334(b)(1) through (b)(3). Compliance with all applicable requirements of 40 CFR 75 is determined to be compliance with this specific condition. Subpart GG. [40 CFR 60.334(b)]
- 23 [40 CFR 60.334(g)] Which Months: All Year Statistical Basis: None specified
- Monitor the steam or water to fuel ratio or other parameters that are continuously monitored as described in 40 CFR 60.334(a), (d) or (f) during the performance test required under 40 CFR 60.8, to establish acceptable values and ranges. Develop and keep on-site a parameter monitoring plan which explains the procedures used to document proper operation of the NOx emission controls. Include the parameter(s) monitored and the acceptable range(s) of the parameter(s) as well as the basis for designating the parameter(s) and acceptable range(s). Include any supplemental data such as engineering analyses, design specifications, manufacturer's recommendations and other relevant information in the monitoring plan. Subpart GG. [40 CFR 60.334(g)]

SPECIFIC REQUIREMENTS

AI ID: 83613 - Entergy Arkansas Inc - Ouachita Power Generating Plant
 Activity Number: PER2004001
 Permit Number: 2160-00111-V1
 Air - Title V Regular Permit Renewal

Group: PCS 0001 Combined Cycle Combustion Turbine Generator/HRSG w/Duct Burner Unit 1**EQT 0001 CTG01 - Combustion Turbine Unit 1**

24 [40 CFR 60.334(h)(2)]

Fuel nitrogen content monitored by the regulation's specified method(s) at the regulation's specified frequency. Monitor the nitrogen content of the fuel combusted in the turbine, if claiming an allowance for fuel bound nitrogen. Determine the nitrogen content of the fuel using methods described in 40 CFR 60.335(b)(9) or an approved alternative. Subpart GG. [40 CFR 60.334(h)(2)]

Which Months: All Year Statistical Basis: None specified

Fuel sulfur content monitored by the regulation's specified method(s) at the regulation's specified frequency. Monitor the total sulfur content of the fuel being fired in the turbine using any combination of the methods allowed by 40 CFR 63.334(h)(3)(i) and (ii). Subpart GG. [40 CFR 60.334(h)(3)]

Which Months: All Year Statistical Basis: None specified

Submit quarterly excess emissions report: Due by the 30th day following the end of each calendar quarter. Report periods during which an exemption provided in 40 CFR 60.332(f) is in effect. Report the date and time the air pollution control system was deactivated, and the date and time the air pollution control system was reactivated. Subpart GG. [40 CFR 60.334(j)(3)]

Include each period during which an exemption provided in 40 CFR 60.332(k) is in effect in the report required in 40 CFR 60.7(c). For each

period, report the type, reasons, and duration of the firing of the emergency fuel. Subpart GG. [40 CFR 60.334(j)(4)]
 Submit excess emissions reports and monitor downtime in accordance with 40 CFR 60.7(c). Report excess emissions for all periods of unit operation, including startup, shutdown and malfunction. Subpart GG. [40 CFR 60.334(j)]

Determine compliance using the test methods and procedures specified in 40 CFR 60.335(a) through (c). Subpart GG.

Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).
 Which Months: All Year Statistical Basis: Six-minute average

Sulfur dioxide <= 0.006 lb/MMBTU.
 Which Months: All Year Statistical Basis: Hourly averageCarbon monoxide <= 9 ppmvd @ 15% O₂.
 Which Months: All Year Statistical Basis: Hourly averageVOC, Total <= 1.4 ppmvd @ 15% O₂.
 Which Months: All Year Statistical Basis: Hourly averageNitrogen oxides <= 4.5 ppmvd @ 15% O₂.
 Which Months: All Year Statistical Basis: Hourly average**EQT 0018 DB01 - Duct Burners Unit 1**

35 [40 CFR 60.42Da(a)(1)]

Particulate matter (10 microns or less) <= 0.03 lb/MMBTU (13 ng/l) heat input. Subpart Da. [40 CFR 60.42Da(a)(1)]

Which Months: All Year Statistical Basis: None specified

Opacity <= 20 percent, except for one 6-minute period per hour of not more than 27% opacity. Subpart Da. [40 CFR 60.42Da(b)]

Which Months: All Year Statistical Basis: Six-minute average

Nitrogen oxides <= 0.20 lb/MMBTU (86 ng/l) heat input. Subpart Da.

Which Months: All Year Statistical Basis: Thirty-day rolling average

SPECIFIC REQUIREMENTS

AI ID: 83613 - Entergy Arkansas Inc - Ouachita Power Generating Plant
 Activity Number: PER20040001
 Permit Number: 2160-00111-V1
 Air - Title V Regular Permit Renewal

Group: PCS 0001 Combined Cycle Combustion Turbine Generator/HRSG w/Duct Burner Unit I**EQT 0018 DB01 - Duct Burners Unit 1**

- 38 [40 CFR 60.47Da(a)] Apply to DEQ for a commercial demonstration permit when proposing to demonstrate an emerging technology. Subpart Da. [40 CFR 60.47Da(a)]
- 39 [40 CFR 60.48Da(c)] Comply with the nitrogen oxides emission standards under 40 CFR 60.44Da at all times except during periods of startup, shutdown, and malfunction. Subpart Da. [40 CFR 60.48Da(c)]
- 40 [40 CFR 60.48Da(c)] Comply with the particulate matter emission standards under 40 CFR 60.42Da at all times except during periods of startup, shutdown, or malfunction. Subpart Da. [40 CFR 60.48Da(c)]
- 41 [40 CFR 60.48Da(e)] Show compliance with the nitrogen oxides standards by completing a separate performance test at the end of each boiler operating day after the initial performance test, and calculating a new 30-day average emission rate. Subpart Da. [40 CFR 60.48Da(e)]
- 42 [40 CFR 60.48Da(f)] Schedule the initial performance test so that the first boiler operating day of the 30 successive boiler operating days is completed within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility. Subpart Da. [40 CFR 60.48Da(f)]
- 43 [40 CFR 60.48Da(g)(1)] Determine compliance with the SO₂ and NO_x emission standards by calculating the arithmetic average of all hourly emission rates for SO₂ and NO_x for the 30 successive boiler operating days, except for data obtained during startup, shutdown, malfunction (NO_x only), or emergency conditions (SO₂ only). Subpart Da. [40 CFR 60.48Da(g)(1)]
- 44 [40 CFR 60.48Da(g)(3)] Determine compliance with particulate matter emission limitations by calculating the arithmetic average of all hourly emission rates for particulate matter each boiler operating day, except for data obtained during startup, shutdown, and malfunction. Subpart Da. [40 CFR 60.48Da(g)(3)]
- 45 [40 CFR 60.48Da(j)] Determine compliance with the emission limits for NO_x required by 40 CFR 60.44Da(a) by conducting the performance test required under 40 CFR 60.8 as specified in 40 CFR 60.48Da(j)(1), or using the continuous emission monitoring system specified under 40 CFR 60.49Da and meeting the requirements of 40 CFR 60.49Da as specified in 40 CFR 60.48Da(j)(2). Subpart Da. [40 CFR 60.48Da(j)]
- 46 [40 CFR 60.49Da(c)] Nitrogen oxides monitored by CMS continuously. Subpart Da. [40 CFR 60.49Da(c)]
- 47 [40 CFR 60.49Da(c)] Which Months: All Year Statistical Basis: One-hour average
- 48 [40 CFR 60.49Da(d)] Nitrogen oxides recordkeeping by electronic or hard copy continuously. Monitor the oxygen or carbon dioxide content of the flue gases at each location where sulfur dioxide or nitrogen oxides emissions are monitored. Subpart Da. [40 CFR 60.49Da(d)]
- 49 [40 CFR 60.49Da(d)] Which Months: All Year Statistical Basis: One-hour average
- 50 [40 CFR 60.49Da(d)(1)] Oxygen or Carbon dioxide recordkeeping by electronic or hard copy continuously. Record the oxygen or carbon dioxide content of the flue gases at each location where sulfur dioxide or nitrogen oxides emissions are monitored. Subpart Da. [40 CFR 60.49Da(d)]
- 51 [40 CFR 60.49Da(s)] Obtain emission data for at least 18 hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement cannot be met with a continuous monitoring system, supplement emission data with other monitoring systems approved by DEQ or the reference methods and procedures as described in 40 CFR 60.49Da(h). Subpart Da. [40 CFR 60.49Da(d)(1)]
- Submit plan: Due to DEQ for approval of a unit-specific monitoring plan for each monitoring system, at least 45 days before commencing certification testing of the monitoring systems. Address in the plan the requirements in 40 CFR 60.49Da(s)(1) through (6). Subpart Da. [40 CFR 60.49Da(s)]

SPECIFIC REQUIREMENTS

AI ID: 83613 - Entergy Arkansas Inc - Ouachita Power Generating Plant
 Activity Number: PER20040001
 Permit Number: 2160-00111-V1
 Air - Title V Regular Permit Renewal

Group: PCS 0001 Combined Cycle Combustion Turbine Generator/HRSG w/Duct Burner Unit 1**EQT 0018 DB01 - Duct Burners Unit 1**

- 52 [40 CFR 60.50Da(a)] Use as reference methods and procedures the methods specified in 40 CFR 60Da, Appendix A or the methods and procedures as specified in 40 CFR 60.50Da, except as provided in 40 CFR 60.8(b), in conducting the performance tests required in 40 CFR 60.8. Subpart Da. [40 CFR 60.50Da(a)]
- 53 [40 CFR 60.50Da(b)] Determine compliance with the particulate matter standards in 40 CFR 60.42Da using the methods and procedures specified in 40 CFR 60.50Da(b)(1) through (b)(3). Subpart Da. [40 CFR 60.50Da(b)]
- 54 [40 CFR 60.50Da(d)] Determine compliance with the nitrogen oxides standard in 40 CFR 60.44Da using the methods and procedures specified in 40 CFR 60.50Da(d)(1) and (d)(2). Subpart Da. [40 CFR 60.50Da(d)]
- 55 [40 CFR 60.51Da(a)] Submit the performance test data from the initial performance test and subsequent performance test and from the performance evaluation of the continuous monitors (including the transmissometer). Subpart Da. [40 CFR 60.51Da(a)]
- 56 [40 CFR 60.51Da(b)] Submit report: Due semiannually for each six-month period. Submit the information specified in 40 CFR 60.51Da(b)(1) through (b)(9) for each 24-hour period. Subpart Da. [40 CFR 60.51Da(b)]
- 57 [40 CFR 60.51Da(c)] Submit report: Due semiannually for each six-month period. If the minimum quantity of emission data as required by 40 CFR 60.49Da is not obtained for any 30 successive boiler operating days, report the information specified in 40 CFR 60.51Da(c)(1) through (c)(5), obtained under the requirements of 40 CFR 60.48Da(h), for that 30-day period. Subpart Da. [40 CFR 60.51Da(c)]
- 58 [40 CFR 60.51Da(f)] Submit a signed statement indicating if any changes were made in operation of the emission control system during periods of data unavailability, for any periods for which opacity, sulfur dioxide or nitrogen oxides emissions data are not available. Submit semiannually for each six-month period. Subpart Da. [40 CFR 60.51Da(f)]
- 59 [40 CFR 60.51Da(h)] Submit a signed statement indicating whether the required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified; the data used to show compliance was or was not obtained in accordance with approved methods and procedures of 40 CFR 60 and is representative of plant performance; the minimum data requirements have or have not been met; or, the minimum data requirements have not been met for errors that were unavoidable; and compliance with the standards has or has not been achieved during the reporting period. Submit semiannually for each six-month period. Subpart Da. [40 CFR 60.51Da(h)]
- 60 [40 CFR 60.51Da(i)] Submit excess emissions report: Due quarterly. Submit opacity levels in excess of the applicable opacity standard and the date of such excesses. Subpart Da. [40 CFR 60.51Da(i)]
- 61 [LAC 33.III.1313.C] Total suspended particulate <= 0.6 lb/MMBTU of heat input (Complies by using sweet natural gas as fuel).
- 62 [LAC 33.III.509] Which Months: All Year Statistical Basis: None specified
- 63 [LAC 33.III.509] Carbon monoxide <= 0.10 lb/MMBTU.
- 64 [LAC 33.III.509] Which Months: All Year Statistical Basis: Hourly average
- 65 [LAC 33.III.509] Particulate matter (10 microns or less) <= 0.02 lb/MMBTU.
- 66 [LAC 33.III.509] Which Months: All Year Statistical Basis: Hourly average
- Nitrogen oxides <= 0.05 lb/MMBTU.
- VOC, Total <= 0.015 lb/MMBTU.
- Which Months: All Year Statistical Basis: Hourly average

SPECIFIC REQUIREMENTS

AI ID: 83613 - Entergy Arkansas Inc - Ouachita Power Generating Plant
Activity Number: PER20040001
Permit Number: 2160-00111-V1
Air - Title V Regular Permit Renewal

Group: PCS 0001 Combined Cycle Combustion Turbine Generator/HRSG w/Duct Burner Unit 1**Group: PCS 0002 Combined Cycle Combustion Turbine Generator/HRSG w/Duct Burner Unit 2**

Group Members: EQT 0002 EQT 0019

EQT 0002 Combustion Turbine Unit 2

- 67 [40 CFR 60.332(a)(1)] Nitrogen oxides <= 0.0075 % by volume at 15% oxygen and on a dry basis in gases discharged to the atmosphere. Use analytical methods and procedures that are accurate to within 5 percent and are approved by DEQ to determine the nitrogen content of the fuel being fired per 40 CFR 60.335(a). Subpart GG. [40 CFR 60.332(a)(1)]
- Which Months: All Year Statistical Basis: None specified
- Fuel sulfur content <= 0.8 % by weight (8000 ppmw) for any fuel burned. Subpart GG. [40 CFR 60.333(b)]
- Which Months: All Year Statistical Basis: None specified
- Oxygen and Nitrogen oxides monitored by continuous emission monitor (CEM) continuously as specified in 40 CFR 60.334(b)(1) through (b)(3). Compliance with all applicable requirements of 40 CFR 75 is determined to be compliance with this specific condition. Subpart GG. [40 CFR 60.334(b)]
- Which Months: All Year Statistical Basis: None specified
- Oxygen and Nitrogen oxides recordkeeping by continuous emission monitor (CEM) continuously as specified in 40 CFR 60.334(b)(1) through (b)(3). Compliance with all applicable requirements of 40 CFR 75 is determined to be compliance with this specific condition. Subpart GG. [40 CFR 60.334(b)]
- Monitor the steam or water to fuel ratio or other parameters that are continuously monitored as described in 40 CFR 60.334(a), (d) or (f) during the performance test required under 40 CFR 60.8, to establish acceptable values and ranges. Develop and keep on-site a parameter monitoring plan which explains the procedures used to document proper operation of the NO_x emission controls. Include the parameter(s) monitored and the acceptable range(s) of the parameter(s) as well as the basis for designating the parameter(s) and acceptable range(s). Include any supplemental data such as engineering analyses, design specifications, manufacturer's recommendations and other relevant information in the monitoring plan. Subpart GG. [40 CFR 60.334(g)]
- Fuel nitrogen content monitored by the regulation's specified method(s) at the regulation's specified frequency. Monitor the nitrogen content of the fuel combusted in the turbine, if claiming an allowance for fuel bound nitrogen. Determine the nitrogen content of the fuel using methods described in 40 CFR 60.335(b)(9) or an approved alternative. Subpart GG. [40 CFR 60.334(h)(2)]
- Which Months: All Year Statistical Basis: None specified
- Fuel sulfur content monitored by the regulation's specified method(s) at the regulation's specified frequency. Monitor the total sulfur content of the fuel being fired in the turbine using any combination of the methods allowed by 40 CFR 63.334(h)(3)(i) and (ii). Subpart GG. [40 CFR 60.334(h)(3)]
- Which Months: All Year Statistical Basis: None specified
- Submit quarterly excess emissions report: Due by the 30th day following the end of each calendar quarter. Report periods during which an exemption provided in 40 CFR 60.332(f) is in effect. Report the date and time the air pollution control system was deactivated, and the date and time the air pollution control system was reactivated. Subpart GG. [40 CFR 60.334(j)(3)]
- Include each period during which an exemption provided in 40 CFR 60.332(k) is in effect in the report required in 40 CFR 60.7(c). For each period, report the type, reasons, and duration of the firing of the emergency fuel. Subpart GG. [40 CFR 60.334(j)(4)]

SPECIFIC REQUIREMENTS

AI ID: 83613 - Entergy Arkansas Inc - Ouachita Power Generating Plant
 Activity Number: PER20040001
 Permit Number: 2160-00111-V1
 Air - Title V Regular Permit Renewal

Group: PCS_0002 Combined Cycle Combustion Turbine Generator/HRSG w/Duct Burner Unit 2**EQT_0002 CTG02 - Combustion Turbine Unit 2**

- 76 [40 CFR 60.334(j)] Submit excess emissions reports and monitor downtime in accordance with 40 CFR 60.7(c). Report excess emissions for all periods of unit operation, including startup, shutdown and malfunction. Subpart GG. [40 CFR 60.334(j)]
- 77 [40 CFR 60.335] Determine compliance using the test methods and procedures specified in 40 CFR 60.335(a) through (c). Subpart GG.
- 78 [LAC 33.III.1311.C] Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).
- 79 [LAC 33.III.509] Which Months: All Year Statistical Basis: Six-minute average Carbon monoxide <= 9 ppmvd @ 15% O₂.
- 80 [LAC 33.III.509] Which Months: All Year Statistical Basis: Hourly average VOC, Total <= 1.4 ppmvd @ 15% O₂.
- 81 [LAC 33.III.509] Which Months: All Year Statistical Basis: Hourly average Sulfur dioxide <= 0.006 lb/MMBTU.
- 82 [LAC 33.III.509] Which Months: All Year Statistical Basis: Hourly average Nitrogen oxides <= 4.5 ppmvd @ 15% O₂.
- 83 [40 CFR 60.42Da(a)(1)] Which Months: All Year Statistical Basis: None specified Particulate matter (10 microns or less) <= 0.03 lb/MMBTU (13 ng/l) heat input. Subpart Da. [40 CFR 60.42Da(a)(1)]
- 84 [40 CFR 60.42Da(b)] Which Months: All Year Statistical Basis: Six-minute average Opacity <= 20 percent, except for one 6-minute period per hour of not more than 27% opacity. Subpart Da. [40 CFR 60.42Da(b)]
- 85 [40 CFR 60.44Da] Which Months: All Year Statistical Basis: Six-minute average Nitrogen oxides <= 0.20 lb/MMBTU (86 ng/l) heat input. Subpart Da.
- 86 [40 CFR 60.47Da(a)] Which Months: All Year Statistical Basis: Thirty-day rolling average Apply to DEQ for a commercial demonstration permit when proposing to demonstrate an emerging technology. Subpart Da. [40 CFR 60.47Da(a)]
- 87 [40 CFR 60.48Da(c)] Comply with the nitrogen oxides emission standards under 40 CFR 60.44Da at all times except during periods of startup, shutdown, and malfunction. Subpart Da. [40 CFR 60.48Da(c)]
- 88 [40 CFR 60.48Da(c)] Comply with the particulate matter emission standards under 40 CFR 60.42Da at all times except during periods of startup, shutdown, or malfunction. Subpart Da. [40 CFR 60.48Da(c)]
- 89 [40 CFR 60.48Da(e)] Show compliance with the nitrogen oxides standards by completing a separate performance test at the end of each boiler operating day after the initial performance test, and calculating a new 30-day average emission rate. Subpart Da. [40 CFR 60.48Da(e)]
- 90 [40 CFR 60.48Da(f)] Schedule the initial performance test so that the first boiler operating day of the 30 successive boiler operating days is completed within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility. Subpart Da. [40 CFR 60.48Da(f)]

EQT_0019 DB02 - Duct Burners Unit 2

- 83 [40 CFR 60.42Da(a)(1)] Particulate matter (10 microns or less) <= 0.03 lb/MMBTU (13 ng/l) heat input. Subpart Da. [40 CFR 60.42Da(a)(1)]
- 84 [40 CFR 60.42Da(b)] Which Months: All Year Statistical Basis: None specified Opacity <= 20 percent, except for one 6-minute period per hour of not more than 27% opacity. Subpart Da. [40 CFR 60.42Da(b)]
- 85 [40 CFR 60.44Da] Which Months: All Year Statistical Basis: Six-minute average Nitrogen oxides <= 0.20 lb/MMBTU (86 ng/l) heat input. Subpart Da.
- 86 [40 CFR 60.47Da(a)] Which Months: All Year Statistical Basis: Thirty-day rolling average Apply to DEQ for a commercial demonstration permit when proposing to demonstrate an emerging technology. Subpart Da. [40 CFR 60.47Da(a)]
- 87 [40 CFR 60.48Da(c)] Comply with the nitrogen oxides emission standards under 40 CFR 60.44Da at all times except during periods of startup, shutdown, and malfunction. Subpart Da. [40 CFR 60.48Da(c)]
- 88 [40 CFR 60.48Da(c)] Comply with the particulate matter emission standards under 40 CFR 60.42Da at all times except during periods of startup, shutdown, or malfunction. Subpart Da. [40 CFR 60.48Da(c)]
- 89 [40 CFR 60.48Da(e)] Show compliance with the nitrogen oxides standards by completing a separate performance test at the end of each boiler operating day after the initial performance test, and calculating a new 30-day average emission rate. Subpart Da. [40 CFR 60.48Da(e)]
- 90 [40 CFR 60.48Da(f)] Schedule the initial performance test so that the first boiler operating day of the 30 successive boiler operating days is completed within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility. Subpart Da. [40 CFR 60.48Da(f)]

SPECIFIC REQUIREMENTS

AI ID: 83613 - Entergy Arkansas Inc - Ouachita Power Generating Plant
 Activity Number: PER20040001
 Permit Number: 2160-00111-V1
 Air - Title V Regular Permit Renewal

Group: PCS 0002 Combined Cycle Combustion Turbine Generator/HRSG w/Duct Burner Unit 2**EQT 0019 DB02 - Duct Burners Unit 2**

- 91 [40 CFR 60.48Da(g)(1)] Determine compliance with the SO₂ and NO_x emission standards by calculating the arithmetic average of all hourly emission rates for SO₂ and NO_x for the 30 successive boiler operating days, except for data obtained during startup, shutdown, malfunction (NO_x only), or emergency conditions (SO₂ only). Subpart Da. [40 CFR 60.48Da(g)(1)]
- 92 [40 CFR 60.48Da(g)(3)] Determine compliance with particulate matter emission limitations by calculating the arithmetic average of all hourly emission rates for particulate matter each boiler operating day, except for data obtained during startup, shutdown, and malfunction. Subpart Da. [40 CFR 60.48Da(g)(3)]
- 93 [40 CFR 60.48Da(j)] Determine compliance with the emission limits for NO_x required by 40 CFR 60.44Da(a) by conducting the performance test required under 40 CFR 60.8 as specified in 40 CFR 60.48Da(j)(1), or using the continuous emission monitoring system specified under 40 CFR 60.49Da and meeting the requirements of 40 CFR 60.49Da as specified in 40 CFR 60.48Da(j)(2). Subpart Da. [40 CFR 60.48Da(j)]
- 94 [40 CFR 60.49Da(c)] Nitrogen oxides monitored by CMS continuously. Subpart Da. [40 CFR 60.49Da(c)]
- 95 [40 CFR 60.49Da(c)] Which Months: All Year Statistical Basis: One-hour average Nitrogen oxides recordkeeping by electronic or hard copy continuously. Subpart Da. [40 CFR 60.49Da(c)]
- 96 [40 CFR 60.49Da(d)] Oxygen or Carbon dioxide recordkeeping by electronic or hard copy continuously. Record the oxygen or carbon dioxide content of the flue gases at each location where sulfur dioxide or nitrogen oxides emissions are monitored. Subpart Da. [40 CFR 60.49Da(d)]
- 97 [40 CFR 60.49Da(d)] Oxygen or Carbon dioxide monitored by CMS continuously. Monitor the oxygen or carbon dioxide content of the flue gases at each location where sulfur dioxide or nitrogen oxides emissions are monitored. Subpart Da. [40 CFR 60.49Da(d)]
- 98 [40 CFR 60.49Da(f)(1)] Which Months: All Year Statistical Basis: One-hour average Obtain emission data for at least 18 hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement cannot be met with a continuous monitoring system, supplement emission data with other monitoring systems approved by DEQ or the reference methods and procedures as described in 40 CFR 60.49Da(h). Subpart Da. [40 CFR 60.49Da(f)(1)]
- 99 [40 CFR 60.49Da(s)] Submit plan: Due to DEQ for approval of a unit-specific monitoring plan for each monitoring system, at least 45 days before commencing certification testing of the monitoring systems. Address in the plan the requirements in 40 CFR 60.49Da(s)(1) through (6). Subpart Da. [40 CFR 60.49Da(s)]
- 100 [40 CFR 60.50Da(a)] Use as reference methods and procedures the methods specified in 40 CFR 60Da, Appendix A or the methods and procedures as specified in 40 CFR 60.50Da, except as provided in 40 CFR 60.8(b), in conducting the performance test required in 40 CFR 60.8. Subpart Da. [40 CFR 60.50Da(a)]
- 101 [40 CFR 60.50Dat(b)] Determine compliance with the particulate matter standards in 40 CFR 60.42Da using the methods and procedures specified in 40 CFR 60.50Da(b)(1) through (b)(3). Subpart Da. [40 CFR 60.50Da(b)]
- 102 [40 CFR 60.50Dat(d)] Determine compliance with the nitrogen oxides standard in 40 CFR 60.44Da using the methods and procedures specified in 40 CFR 60.50Da(d)(1) and (d)(2). Subpart Da. [40 CFR 60.50Da(d)]
- 103 [40 CFR 60.51Da(a)] Submit the performance test data from the initial performance test and subsequent performance test and from the performance evaluation of the continuous monitors (including the transmissometer). Subpart Da. [40 CFR 60.51Da(a)]
- 104 [40 CFR 60.51Da(b)] Submit report: Due semiannually for each six-month period. Submit the information specified in 40 CFR 60.51Da(b)(1) through (b)(9) for each 24-hour period. Subpart Da. [40 CFR 60.51Da(b)]

SPECIFIC REQUIREMENTS

AI ID: 83613 - Entergy Arkansas Inc - Ouachita Power Generating Plant
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Group: PCS 0002 Combined Cycle Combustion Turbine Generator/HRSIG w/Duct Burner Unit 2**EQT 0019 DB02 - Duct Burners Unit 2**

- 105 [40 CFR 60.51Da(c)] Submit report. Due semiannually for each six-month period. If the minimum quantity of emission data as required by 40 CFR 60.49Da is not obtained for any 30 successive boiler operating days, report the information specified in 40 CFR 60.51Da(c)(1) through (c)(5), obtained under the requirements of 40 CFR 60.48Da(h), for that 30-day period. Subpart Da. [40 CFR 60.51Da(c)]
- 106 [40 CFR 60.51Da(i)] Submit a signed statement indicating if any changes were made in operation of the emission control system during periods of data unavailability, for any periods for which opacity, sulfur dioxide or nitrogen oxides emissions data are not available. Submit semiannually for each six-month period. Subpart Da. [40 CFR 60.51Da(f)]
- 107 [40 CFR 60.51Da(h)] Submit a signed statement indicating whether the required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified; the data used to show compliance was or was not obtained in accordance with approved methods and procedures of 40 CFR 60 and is representative of plant performance; the minimum data requirements have or have not been met; or, the minimum data requirements have not been met for errors that were unavoidable; and compliance with the standards has or has not been achieved during the reporting period. Submit semiannually for each six-month period. Subpart Da. [40 CFR 60.51Da(h)]
- 108 [40 CFR 60.51Da(j)] Submit excess emissions report. Due quarterly. Submit opacity levels in excess of the applicable opacity standard and the date of such excesses.
- 109 [LAC 33:III.13.13.C] Subpart Da. [40 CFR 60.51Da(i)] Total suspended particulate <= 0.6 lb/MMBTU of heat input (Complies by using sweet natural gas as fuel).
- 110 [LAC 33:III.509] Which Months: All Year Statistical Basis: None specified
- Nitrogen oxides <= 0.05 lb/MMBTU.
- 111 [LAC 33:III.509] Which Months: All Year Statistical Basis: Hourly average
- Carbon monoxide <= 0.10 lb/MMBTU.
- 112 [LAC 33:III.509] Which Months: All Year Statistical Basis: Hourly average
- VOC, Total <= 0.015 lb/MMBTU.
- 113 [LAC 33:III.509] Which Months: All Year Statistical Basis: Hourly average
- Particulate matter (10 microns or less) <= 0.02 lb/MMBTU.
- 114 [LAC 33:III.509] Which Months: All Year Statistical Basis: Hourly average
- Sulfur dioxide <= 0.006 lb/MMBTU.

Group: PCS 0003 Combined Cycle Combustion Turbine Generator/HRSIG w/Duct Burner Unit 3

Group Members: EQT 0003EQT 0020

EQT 0003 CTG03 - Combustion Turbine Unit 3

- 115 [40 CFR 60.332(a)(1)] Nitrogen oxides <= 0.0075 % by volume at 15% oxygen and on a dry basis in gases discharged to the atmosphere. Use analytical methods and procedures that are accurate to within 5 percent and are approved by DEQ to determine the nitrogen content of the fuel being fired per 40 CFR 60.335(a). Subpart GG. [40 CFR 60.332(a)(1)]
- Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS

AI ID: 83613 - Entergy Arkansas Inc - Ouachita Power Generating Plant
Activity Number: PER20040001
Permit Number: 2160-00111-V1
Air - Title V Regular Permit Renewal

Group: PCS 0003 Combined Cycle Combustion Turbine Generator/HRSG w/Duct Burner Unit 3**EQT 0003 CTG03 - Combustion Turbine Unit 3**

- 116 [40 CFR 60.333(b)]
 Fuel sulfur content <= 0.8 % by weight (8000 ppmw) for any fuel burned. Subpart GG. [40 CFR 60.333(b)]
 Which Months: All Year Statistical Basis: None specified
- Oxygen and Nitrogen oxides monitored by continuous emission monitor (CEM) continuously as specified in 40 CFR 60.334(b)(1) through (b)(3). Compliance with all applicable requirements of 40 CFR 75 is determined to be compliance with this specific condition. Subpart GG. [40 CFR 60.334(b)]
- 117 [40 CFR 60.334(b)]
 Which Months: All Year Statistical Basis: None specified
 Oxygen and Nitrogen oxides recordkeeping by continuous emission monitor (CEM) continuously as specified in 40 CFR 60.334(b)(1) through (b)(3). Compliance with all applicable requirements of 40 CFR 75 is determined to be compliance with this specific condition. Subpart GG. [40 CFR 60.334(b)]
- 118 [40 CFR 60.334(g)]
 Monitor the steam or water to fuel ratio or other parameters that are continuously monitored as described in 40 CFR 60.334(a), (d) or (f) during the performance test required under 40 CFR 60.8, to establish acceptable values and ranges. Develop and keep on-site a parameter monitoring plan which explains the procedures used to document proper operation of the NOx emission controls. Include the parameter(s) monitored and the acceptable range(s) of the parameter(s) as well as the basis for designating the parameter(s) and acceptable range(s). Include any supplemental data such as engineering analyses, design specifications, manufacturer's recommendations and other relevant information in the monitoring plan. Subpart GG. [40 CFR 60.334(g)]
- Fuel nitrogen content monitored by the regulation's specified method(s) at the regulation's specified frequency. Monitor the nitrogen content of the fuel combusted in the turbine, if claiming an allowance for fuel bound nitrogen. Determine the nitrogen content of the fuel using methods described in 40 CFR 60.335(b)(9) or an approved alternative. Subpart GG. [40 CFR 60.334(h)(2)]
- 119 [40 CFR 60.334(h)(2)]
 Which Months: All Year Statistical Basis: None specified
 Fuel sulfur content monitored by the regulation's specified method(s) at the regulation's specified frequency. Monitor the total sulfur content of the fuel being fired in the turbine using any combination of the methods allowed by 40 CFR 63.334(h)(3)(i) and (ii). Subpart GG. [40 CFR 60.334(h)(3)]
- 120 [40 CFR 60.334(h)(3)]
 Which Months: All Year Statistical Basis: None specified
 Submit quarterly excess emissions report: Due by the 30th day following the end of each calendar quarter. Report periods during which an exemption provided in 40 CFR 60.332(f) is in effect. Report the date and time the air pollution control system was deactivated, and the date and time the air pollution control system was reactivated. Subpart GG. [40 CFR 60.334(j)(3)]
- Include each period during which an exemption provided in 40 CFR 60.332(k) is in effect in the report required in 40 CFR 60.7(c). For each period, report the type, reasons, and duration of the firing of the emergency fuel. Subpart GG. [40 CFR 60.334(j)(4)]
- 121 [40 CFR 60.334(h)(3)]
 Which Months: All Year Statistical Basis: Six-minute average
 Submit excess emissions reports and monitor downtime in accordance with 40 CFR 60.7(c). Report excess emissions for all periods of unit operation, including startup, shutdown and malfunction. Subpart GG. [40 CFR 60.334(j)]
- Determine compliance using the test methods and procedures specified in 40 CFR 60.335(a) through (c). Subpart GG.
- 122 [40 CFR 60.334(j)(3)]
 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).
- 123 [40 CFR 60.334(j)(4)]
 Which Months: All Year Statistical Basis: Six-minute average
- 124 [40 CFR 60.334(j)]
- 125 [40 CFR 60.335]
- 126 [LAC 33:III.1311.C]

SPECIFIC REQUIREMENTS

AI ID: 83613 - Entergy Arkansas Inc - Ouachita Power Generating Plant
Activity Number: PER20040001
Permit Number: 2160-00111-V1
Air - Title V Regular Permit Renewal

Group: PCS 0003 Combined Cycle Combustion Turbine Generator/HRSG w/Duct Burner Unit 3**EQT 0003 CTG03 - Combustion Turbine Unit 3**

- 127 [LAC 33:III.509] VOC, Total <= 1.4 ppmdv @ 15% O₂.
Which Months: All Year Statistical Basis: Hourly average
- 128 [LAC 33:III.509] Nitrogen oxides <= 4.5 ppmdv @ 15% O₂.
Which Months: All Year Statistical Basis: Hourly average
- 129 [LAC 33:III.509] Carbon monoxide <= 9 ppmdv @ 15% O₂.
Which Months: All Year Statistical Basis: Hourly average
- 130 [LAC 33:III.509] Sulfur dioxide <= 0.006 lb/MMBTU.
Which Months: All Year Statistical Basis: Hourly average

EQT 0020 DB03 - Duct Burners Unit 3

- 131 [40 CFR 60.42Da(a)(1)] Particulate matter (10 microns or less) <= 0.03 lb/MMBTU (13 ng/J) heat input. Subpart Da. [40 CFR 60.42Da(a)(1)]
Which Months: All Year Statistical Basis: None specified
Opacity <= 20 percent, except for one 6-minute period per hour of not more than 27% opacity. Subpart Da. [40 CFR 60.42Da(b)]
- 132 [40 CFR 60.42Da(b)] Which Months: All Year Statistical Basis: Six-minute average
Nitrogen oxides <= 0.20 lb/MMBTU (36 ng/J) heat input. Subpart Da.
- 133 [40 CFR 60.44Da] Which Months: All Year Statistical Basis: Thirty-day rolling average
Apply to DEQ for a commercial demonstration permit when proposing to demonstrate an emerging technology. Subpart Da. [40 CFR 60.47Da(a)]
- 134 [40 CFR 60.47Da(a)] Comply with the particulate matter emission standards under 40 CFR 60.42Da at all times except during periods of startup, shutdown, or malfunction. Subpart Da. [40 CFR 60.44Da]
- 135 [40 CFR 60.48Da(c)] Comply with the nitrogen oxides emission standards under 40 CFR 60.44Da at all times except during periods of startup, shutdown, and malfunction. Subpart Da. [40 CFR 60.48Da(c)]
- 136 [40 CFR 60.48Da(c)] Show compliance with the nitrogen oxides standards by completing a separate performance test at the end of each boiler operating day after the initial performance test, and calculating a new 30-day average emission rate. Subpart Da. [40 CFR 60.48Da(e)]
Schedule the initial performance test so that the first boiler operating day of the 30 successive boiler operating days is completed within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility. Subpart Da. [40 CFR 60.48Da(f)]
- 137 [40 CFR 60.48Da(e)] Determine compliance with the SO₂ and NO_x emission standards by calculating the arithmetic average of all hourly emission rates for SO₂ and NO_x for the 30 successive boiler operating days, except for data obtained during startup, shutdown, malfunction (NO_x only), or emergency conditions (SO₂ only). Subpart Da. [40 CFR 60.48Da(g)(1)]
- 138 [40 CFR 60.48Da(f)] Determine compliance with particulate matter emission limitations by calculating the arithmetic average of all hourly emission rates for particulate matter each boiler operating day, except for data obtained during startup, shutdown, and malfunction. Subpart Da. [40 CFR 60.48Da(g)(3)]
- 139 [40 CFR 60.48Da(g)(1)]
- 140 [40 CFR 60.48Da(g)(3)]

SPECIFIC REQUIREMENTS

AI ID: 83613 - Entergy Arkansas Inc - Ouachita Power Generating Plant
 Activity Number: PER20040001
 Permit Number: 2160-00111-V1
 Air - Title V Regular Permit Renewal

Group: PCS 0003 Combined Cycle Combustion Turbine Generator/HRSSG w/Duct Burner Unit 3**EQT 0020 DB03 - Duct Burners Unit 3**

- 141 [40 CFR 60.48Da(j)] Determine compliance with the emission limits for NOx required by 40 CFR 60.44Da(a) by conducting the performance test required under 40 CFR 60.8 as specified in 40 CFR 60.48Da(j)(1), or using the continuous emission monitoring system specified under 40 CFR 60.49Da and meeting the requirements of 40 CFR 60.49Da as specified in 40 CFR 60.48Da(j)(2). Subpart Da. [40 CFR 60.48Da(j)]
- 142 [40 CFR 60.48Da(k)] Determine compliance with the emission limitation for NOx required by 40 CFR 60.44Da(d)(1) or (e)(1) by using either of the procedures specified in 40 CFR 60.48Da(k)(1) and (k)(2). Subpart Da. [40 CFR 60.48Da(k)]
- 143 [40 CFR 60.49Da(c)] Nitrogen oxides monitored by CMS continuously. Subpart Da. [40 CFR 60.49Da(c)]
- 144 [40 CFR 60.49Da(c)] Which Months: All Year Statistical Basis: One-hour average
- 145 [40 CFR 60.49Da(d)] Nitrogen oxides recordkeeping by electronic or hard copy continuously. Record the oxygen or carbon dioxide content of the flue Oxygen or Carbon dioxide recordkeeping by electronic or hard copy continuously. Record the oxygen or carbon dioxide content of the flue gases at each location where sulfur dioxide or nitrogen oxides emissions are monitored. Subpart Da. [40 CFR 60.49Da(d)]
- 146 [40 CFR 60.49Da(d)] Oxygen or Carbon dioxide monitored by CMS continuously. Monitor the oxygen or carbon dioxide content of the flue gases at each location where sulfur dioxide or nitrogen oxides emissions are monitored. Subpart Da. [40 CFR 60.49Da(d)]
- 147 [40 CFR 60.49Da(f)(1)] Which Months: All Year Statistical Basis: One-hour average
- 148 [40 CFR 60.49Da(s)] Obtain emission data for at least 18 hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement cannot be met with a continuous monitoring system, supplement emission data with other monitoring systems approved by DEQ or the reference methods and procedures as described in 40 CFR 60.49Da(h). Subpart Da. [40 CFR 60.49Da(f)(1)]
- 149 [40 CFR 60.50Da(a)] Submit plan: Due to DEQ for approval of a unit-specific monitoring plan for each monitoring system, at least 45 days before commencing certification testing of the monitoring systems. Address in the plan the requirements in 40 CFR 60.49Da(s)(1) through (6). Subpart Da. [40 CFR 60.49Da(s)]
- 150 [40 CFR 60.50Da(b)] Use as reference methods and procedures the methods specified in 40 CFR 60Da, Appendix A or the methods and procedures as specified in 40 CFR 60.50Da, except as provided in 40 CFR 60.8(b), in conducting the performance tests required in 40 CFR 60.8. Subpart Da. [40 CFR 60.50Da(a)]
- 151 [40 CFR 60.50Da(d)] Determine compliance with the particulate matter standards in 40 CFR 60.42Da using the methods and procedures specified in 40 CFR 60.50Da(b)(1) through (b)(3). Subpart Da. [40 CFR 60.50Da(b)]
- 152 [40 CFR 60.51Da(a)] Determine compliance with the nitrogen oxides standard in 40 CFR 60.44Da using the methods and procedures specified in 40 CFR 60.50Da(d)(1) and (d)(2). Subpart Da. [40 CFR 60.50Da(d)]
- 153 [40 CFR 60.51Da(b)] Submit the performance test data from the initial performance test and subsequent performance test and from the performance evaluation of the continuous monitors (including the transmissometer). Subpart Da. [40 CFR 60.51Da(a)]
- 154 [40 CFR 60.51Da(c)] Submit report: Due semiannually for each six-month period. Submit the information specified in 40 CFR 60.51Da(b)(1) through (b)(9) for each 24-hour period. Subpart Da. [40 CFR 60.51Da(b)]
- 155 [40 CFR 60.51Da(c)] Submit report: Due semiannually for each six-month period. If the minimum quantity of emission data as required by 40 CFR 60.49Da is not obtained for any 30 successive boiler operating days, report the information specified in 40 CFR 60.51Da(c)(1) through (c)(5), obtained under the requirements of 40 CFR 60.48Da(h), for that 30-day period. Subpart Da. [40 CFR 60.51Da(c)]

SPECIFIC REQUIREMENTS

AI ID: 83613 - Entergy Arkansas Inc - Ouachita Power Generating Plant
 Activity Number: PER20040001
 Permit Number: 2160-00111-V1
 Air - Title V Regular Permit Renewal

Group: PCS 0003 Combined Cycle Combustion Turbine Generator/HRSG w/Duct Burner Unit 3**EQT 0020 DB03 - Duct Burners Unit 3**

155 [40 CFR 60.51Da(f)]

Submit a signed statement indicating if any changes were made in operation of the emission control system during periods of data unavailability, for any periods for which opacity, sulfur dioxide or nitrogen oxides emissions data are not available. Submit semiannually for each six-month period. Subpart Da. [40 CFR 60.51Da(f)]

156 [40 CFR 60.51Da(h)]
 Submit a signed statement indicating whether the required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified; the data used to show compliance was or was not obtained in accordance with approved methods and procedures of 40 CFR 60 and is representative of plant performance; the minimum data requirements have or have not been met; or, the minimum data requirements have not been met for errors that were unavoidable; and compliance with the standards has or has not been achieved during the reporting period. Submit semiannually for each six-month period. Subpart Da. [40 CFR 60.51Da(h)]
 Submit excess emissions report: Due quarterly. Submit opacity levels in excess of the applicable opacity standard and the date of such excesses.

Subpart Da. [40 CFR 60.51Da(i)]

Total suspended particulate <= 0.6 lb/MMBTU of heat input (Complies by using sweet natural gas as fuel).
 Which Months: All Year Statistical Basis: None specified
 VOC, Total <= 0.015 lb/MMBTU.

Which Months: All Year Statistical Basis: Hourly average
 Sulfur dioxide <= 0.006 lb/MMBTU.

Which Months: All Year Statistical Basis: Hourly average
 Particulate matter (10 microns or less) <= 0.02 lb/MMBTU.

Which Months: All Year Statistical Basis: Hourly average
 Nitrogen oxides <= 0.05 lb/MMBTU.

Which Months: All Year Statistical Basis: Hourly average
 Carbon monoxide <= 0.10 lb/MMBTU.

Which Months: All Year Statistical Basis: Hourly average
 VOC, Total <= 0.015 lb/MMBTU.

EQT 0004 HTR01 - Fuel Heater 1

164 [LAC 33:III.1101.B]

Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).

Which Months: All Year Statistical Basis: None specified
 Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using natural gas as fuel).

Which Months: All Year Statistical Basis: Six-minute average
 Total suspended particulate <= 0.6 lb/MMBTU of heat input (Complies by using sweet natural gas as fuel).
 Which Months: All Year Statistical Basis: None specified

SPECIFIC REQUIREMENTS**AI ID: 83613 - Entergy Arkansas Inc - Ouachita Power Generating Plant****Activity Number: PER20040001****Permit Number: 2160-00111-V1****Air - Title V Regular Permit Renewal****EQT_0005 HTR02 - Fuel Heater 2**

167 [LAC 33:III.1313.C]

Total suspended particulate <= 0.6 lb/MMBTU of heat input (Complies by using sweet natural gas as fuel).
 Which Months: All Year Statistical Basis: None specified

EQT_0006 HTR03 - Fuel Heater 3

168 [LAC 33:III.1313.C]

Total suspended particulate <= 0.6 lb/MMBTU of heat input (Complies by using sweet natural gas as fuel).
 Which Months: All Year Statistical Basis: None specified

EQT_0007 CT1 - Cooling Tower 1

169 [LAC 33:III.509]

Determined as BACT in PSD-LA-651: Design with integrated drift eliminators to minimize drift loss.

EQT_0008 CT2 - Cooling Tower 2

170 [LAC 33:III.509]

Determined as BACT in PSD-LA-651: Design with integrated drift eliminators to minimize drift loss.

EQT_0009 CT3 - Cooling Tower 3

171 [LAC 33:III.509]

Determined as BACT in PSD-LA-651: Design with integrated drift eliminators to minimize drift loss.

EQT_0010 DFP - Diesel Firewater Pump

172 [LAC 33:III.1101.B]

Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).
 Which Months: All Year Statistical Basis: None specified

Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).
 Which Months: All Year Statistical Basis: Six-minute average

Determined as BACT in PSD-LA-651:

PM10: Proper combustion practices and designs.

SO2: Use of low sulfur diesel.

NOX: Proper engine design.

CO: Proper combustion practices and designs.

VOC: Proper combustion practices and designs.

EQT_0012 SUB - Auxiliary Boiler

SPECIFIC REQUIREMENTS

AI ID: 83613 - Entergy Arkansas Inc - Ouachita Power Generating Plant
Activity Number: PER20040001
Permit Number: 2160-00111-V1
Air - Title V Regular Permit Renewal

EQT 0012 SUB - Auxiliary Boiler

175 [LAC 33:III.1101.B]

Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).

176 [LAC 33:III.1313.C]

Which Months: All Year Statistical Basis: None specified

177 [LAC 33:III.509]

Total suspended particulate <= 0.6 lb/MMBTU of heat input (Complies by using sweet natural gas as fuel).

178 [LAC 33:III.1101.B]

Which Months: All Year Statistical Basis: None specified

179 [LAC 33:III.1311.C]

Determined as BACT in PSD-LA-651:

180 [LAC 33:III.509]

PM10: Proper combustion practices and designs.

SO2: Use of pipeline quality natural gas.

NOX: Use of Low NOX Burners.

CO: Proper combustion practices and designs

VOC: Proper combustion practices and designs.

EQT 0014 DG - Diesel Emergency Generator

178 [LAC 33:III.1101.B]

Opacity <= 20 percent, except during the cleaning of a fire box or building of a new fire, soot blowing or lancing, charging of an incinerator, equipment changes, ash removal or rapping of precipitators, which may have an opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).

179 [LAC 33:III.1311.C]

Which Months: All Year Statistical Basis: None specified

180 [LAC 33:III.509]

Opacity <= 20 percent; except emissions may have an average opacity in excess of 20 percent for not more than one six-minute period in any 60 consecutive minutes (Complies by using sweet natural gas as fuel).

Which Months: All Year Statistical Basis: Six-minute average

181 [LAC 33:III.509]

Determined as BACT in PSD-LA-651:

182 [LAC 33:III.509]

PM10: Proper combustion practices and designs.

SO2: Use of low sulfur diesel.

NOX: Proper engine design.

CO: Proper combustion practices and designs.

VOC: Proper combustion practices and designs.

GRP 0002 ARS - Acid Rain Sources

Group Members: EQT 0001EQT 0002EQT 0003

SPECIFIC REQUIREMENTS

AI ID: 83613 - Entergy Arkansas Inc - Ouachita Power Generating Plant
Activity Number: PER20040001
Permit Number: 2160-00111-V1
Air - Title V Regular Permit Renewal

GRP 0002 ARS - Acid Rain Sources

181 [40 CFR 75.10(a)(2)]

To determine NOX emissions, install, certify, operate, and maintain in accordance with all the requirements of 40 CFR 75 a NOX-diluent continuous emission monitoring system (consisting of a NOX pollutant concentration monitor and an O2 or CO2 diluent gas monitor) with an automated data acquisition and handling system for measuring and recording NOX concentration (in ppm), O2 or CO2 concentration (in percent O2 or CO2), and NOX emission rate (in lb/mmBtu) discharged to the atmosphere, except as provided in 40 CFR 75.12 and 75.17 and subpart E of 40 CFR 75. The owner or operator shall account for total NOX emissions, both NO and NO₂, either by monitoring for both NO and NO₂ or by monitoring for NO only and adjusting the emissions data to account for NO₂. [40 CFR 75.10(a)(2)]

182 [40 CFR 75.10(a)(3)]

Determine CO₂ emissions by using one of the options in 40 CFR 75.10(a)(3)(i), (ii), or (iii), except as provided in 40 CFR 75.13 and subpart E of 40 CFR 75. [40 CFR 75.10(a)(3)]

The owner or operator shall ensure that each continuous emission monitoring system meets the equipment, installation, and performance specifications in appendix A to 40 CFR 75; and is maintained according to the quality assurance and quality control procedures in appendix B to 40 CFR 75; and shall record SO₂ and NOX emissions in the appropriate units of measurement (i.e., lb/hr for SO₂ and lb/MM Btu for NOX). [40 CFR 75.10(b)]

184 [40 CFR 75.10(c)]

The owner or operator shall determine and record the heat input rate, in units of MM Btu/hr, to each affected unit for every hour or part of an hour any fuel is combusted following the procedures in appendix F to 40 CFR 75. [40 CFR 75.10(c)]

The owner or operator shall ensure that all continuous emission and opacity monitoring systems are in operation and monitoring unit emissions or opacity at all times that the affected unit combusts any fuel except as provided in 40 CFR 75.11(e) and during periods of calibration, quality assurance, or preventive maintenance, performed pursuant to 40 CFR 75.21 and appendix B of 40 CFR 75, periods of repair, periods of backups of data from the data acquisition and handling system, or recertification performed pursuant to 40 CFR 75.20. The owner or operator shall also ensure, subject to the aforementioned exceptions, that all continuous opacity monitoring systems are in operation and monitoring opacity during the time following combustion when fans are still operating, unless fan operation is not required to be included under any other applicable Federal or State regulation, or permit. The owner or operator shall ensure that the requirements of 40 CFR 75.10(d)(1), (2), and (3), as applicable, are met. [40 CFR 75.10(d)]

The owner or operator shall ensure that each continuous emission monitoring system is capable of accurately measuring, recording, and reporting data, and shall not incur an exceedance of the full scale range, except as provided in sections 2.1.1.5, 2.1.2.5, and 2.1.4.3 of appendix A to 40 CFR 75. [40 CFR 75.10(f)]

The owner or operator shall record and the designated representative shall report the hourly, daily, quarterly, and annual information collected under the requirements of 40 CFR 75 as specified in subparts F and G of 40 CFR 75. [40 CFR 75.10(g)]

Measure and record SO₂ emissions by providing information satisfactory to the Administrator using the applicable procedures specified in appendix D to 40 CFR 75 for estimating hourly SO₂ mass emissions. [40 CFR 75.11(d)(2)]

Comply with the applicable provisions of Subpart C-Operation and Maintenance Requirements, Subpart D-Missing Data Substitution Procedures, Subpart F-Recordkeeping Requirements, and Subpart G-Reporting Requirements.

The designated representative shall submit a complete Acid Rain permit application (including a compliance plan) in accordance with the deadlines specified in 40 CFR 72.30, a complete reduced utilization plan if required under 40 CFR 72.43, and any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit. [LAC 33:III.505, 40 CFR 72.9(a)(1)]

GRP 0002 ARS - Acid Rain Sources

187 [40 CFR 75.10(g)]

To determine NOX emissions, install, certify, operate, and maintain in accordance with all the requirements of 40 CFR 75 a NOX-diluent continuous emission monitoring system (consisting of a NOX pollutant concentration monitor and an O2 or CO2 diluent gas monitor) with an automated data acquisition and handling system for measuring and recording NOX concentration (in ppm), O2 or CO2 concentration (in percent O2 or CO2), and NOX emission rate (in lb/mmBtu) discharged to the atmosphere, except as provided in 40 CFR 75.12 and 75.17 and subpart E of 40 CFR 75. The owner or operator shall account for total NOX emissions, both NO and NO₂, either by monitoring for both NO and NO₂ or by monitoring for NO only and adjusting the emissions data to account for NO₂. [40 CFR 75.10(a)(2)]

188 [40 CFR 75.11(d)(2)]

Determine CO₂ emissions by using one of the options in 40 CFR 75.10(a)(3)(i), (ii), or (iii), except as provided in 40 CFR 75.13 and subpart E of 40 CFR 75. [40 CFR 75.10(a)(3)]

189 [40 CFR 75.]

The owner or operator shall ensure that each continuous emission monitoring system meets the equipment, installation, and performance specifications in appendix A to 40 CFR 75; and is maintained according to the quality assurance and quality control procedures in appendix B to 40 CFR 75; and shall record SO₂ and NOX emissions in the appropriate units of measurement (i.e., lb/hr for SO₂ and lb/MM Btu for NOX). [40 CFR 75.10(b)]

The owner or operator shall determine and record the heat input rate, in units of MM Btu/hr, to each affected unit for every hour or part of an hour any fuel is combusted following the procedures in appendix F to 40 CFR 75. [40 CFR 75.10(c)]

The owner or operator shall ensure that all continuous emission and opacity monitoring systems are in operation and monitoring unit emissions or opacity at all times that the affected unit combusts any fuel except as provided in 40 CFR 75.11(e) and during periods of calibration, quality assurance, or preventive maintenance, performed pursuant to 40 CFR 75.21 and appendix B of 40 CFR 75, periods of repair, periods of backups of data from the data acquisition and handling system, or recertification performed pursuant to 40 CFR 75.20. The owner or operator shall also ensure, subject to the aforementioned exceptions, that all continuous opacity monitoring systems are in operation and monitoring opacity during the time following combustion when fans are still operating, unless fan operation is not required to be included under any other applicable Federal or State regulation, or permit. The owner or operator shall ensure that the requirements of 40 CFR 75.10(d)(1), (2), and (3), as applicable, are met. [40 CFR 75.10(d)]

190 [LAC 33:III.505]

The owner or operator shall ensure that each continuous emission monitoring system is capable of accurately measuring, recording, and reporting data, and shall not incur an exceedance of the full scale range, except as provided in sections 2.1.1.5, 2.1.2.5, and 2.1.4.3 of appendix A to 40 CFR 75. [40 CFR 75.10(f)]

SPECIFIC REQUIREMENTS

AI ID: 83613 - Entergy Arkansas Inc - Ouachita Power Generating Plant
Activity Number: PER2040001
Permit Number: 2160-00111-V1
Air - Title V Regular Permit Renewal

GRP 0002 ARS - Acid Rain Sources

Keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority.

- 1.) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24, provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.
- 2.) All emissions monitoring information, in accordance with 40 CFR 75, provided that to the extent that part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
- 3.) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program.¹¹
- 4.) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program. [LAC 33:III.505, 40 CFR 72.9(f)(1)]

The designated representative shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 75 and Subpart I of 40 CFR 72. [LAC 33:III.505, 40 CFR 72.9(f)(2)]

The owners and operators shall hold allowances, as of the allowance transfer deadline, in the source's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the source and comply with the applicable Acid Rain emissions limitation for sulfur dioxide. [LAC 33:III.505, 40 CFR 72.9(c)(1)]

An allowance shall not be deducted, in order to comply with the requirements under 40 CFR 72.9(c)(1), prior to the calendar year for which the allowance was allocated. [LAC 33:III.505, 40 CFR 72.9(c)(5)]

The owners and operators of an affected source that has excess emissions in any calendar year shall pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR 77, and comply with the terms of an approved offset plan, as required by 40 CFR 77. [LAC 33:III.505, 40 CFR 72.9(e)(2)]

Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority, and have an Acid Rain Permit. [LAC 33:III.505, 40 CFR 72.9(a)(2)]

The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR 77. [LAC 33:III.505, 40 CFR 72.9(e)(1)]

Comply with the monitoring requirements as provided in 40 CFR 75. [LAC 33:III.505, 40 CFR 72.9(b)]

SCN 0001 SUSD Unit 1 - Unit 1 Startup/Shutdown

Group Members: EQT 0001

Startup is defined as the time from initial firing of the unit until the point at which the unit has achieved an operational temperature of 2280°F. Normal Operational Mode begins once the unit has achieved 2280°F. Shutdown is defined as the time that begins once the unit, after having achieved Normal Operational Mode as described above, lowers its operating temperature below 2230°F and ends once the unit has ceased all fuel combustion.

Good combustion practices is determined as BACT for emissions of CO during periods of startup and shutdown.

No additional controls is determined as BACT for emissions of NOx during periods of startup and shutdown.

SPECIFIC REQUIREMENTS

AI ID: 83613 - Entergy Arkansas Inc - Ouachita Power Generating Plant
 Activity Number: PER20040001
 Permit Number: 2160-00111-V1
Air - Title V Regular Permit Renewal

SCN 0002 SUSD Unit 2 - Unit 2 Startup/Shutdown

Group Members: EQT 0002

- 202 [LAC 33:III.509] Good combustion practices is determined as BACT for emissions of CO during periods of startup and shutdown.
No additional controls is determined as BACT for emissions of NOx during periods of startup and shutdown.
- 203 [LAC 33:III.509] Startup is defined as the time from initial firing of the unit until the point at which the unit has achieved an operational temperature of 2280°F.
- 204 [LAC 33:III.509] Normal Operational Mode begins once the unit has achieved 2280°F. Shutdown is defined as the time that begins once the unit, after having achieved Normal Operational Mode as described above, lowers its operating temperature below 2230°F and ends once the unit has ceased all fuel combustion.

SCN 0003 SUSD Unit 3 - Unit 3 Startup/Shutdown

Group Members: EQT 0003

- 205 [LAC 33:III.509] Good combustion practices is determined as BACT for emissions of CO during periods of startup and shutdown.
No additional controls is determined as BACT for emissions of NOx during periods of startup and shutdown.
- 206 [LAC 33:III.509] Startup is defined as the time from initial firing of the unit until the point at which the unit has achieved an operational temperature of 2280°F.
- 207 [LAC 33:III.509] Normal Operational Mode begins once the unit has achieved 2280°F. Shutdown is defined as the time that begins once the unit, after having achieved Normal Operational Mode as described above, lowers its operating temperature below 2230°F and ends once the unit has ceased all fuel combustion.

UNF 0001 Entire Facility - Entire Facility

- 208 [40 CFR 60] All affected facilities shall comply with all applicable provisions in 40 CFR 60 Subpart A.
Submit Title V permit application for renewal: Due 6 months before permit expiration date. [40 CFR 70.5(a)(1)(iii)]
Submit Title V monitoring results report: Due semiannually, by March 31 and September 30th for the preceding periods encompassing July through December and January through June, respectively. Submit reports to the Office of Environmental Compliance, Surveillance Division. Certify reports by a responsible company official. Clearly identify all instances of deviations from permitted monitoring requirements. For previously reported deviations, in lieu of attaching the individual deviation reports, clearly reference the communication(s)/correspondence(s) constituting the prior report, including the date the prior report was submitted. [40 CFR 70.6(a)(3)(iii)(A)]
Submit Title V excess emissions report: Due quarterly, by June 30, September 30, December 31, March 31. Submit reports of all permit deviations to the Office of Environmental Compliance, Surveillance Division. Certify all reports by a responsible official in accordance with 40 CFR 70.5(d). The reports submitted on March 31 and September 30 may be consolidated with the semi-annual reports required by 40 CFR 70.6(a)(3)(iii)(A) as long as the report clearly indicates this and all required information is included and clearly delineated in the consolidated report. Unless required by an applicable reporting requirement, a written report is not required during periods in which there is no deviation. [40 CFR 70.6(a)(3)(iii)(B)]
- 211 [40 CFR 70.6(a)(3)(iii)(B)]

SPECIFIC REQUIREMENTS

AI ID: 83613 - Entergy Arkansas Inc - Ouachita Power Generating Plant
Activity Number: PER20040001
Permit Number: 2160-00111-V1
Air - Title V Regular Permit Renewal

UNF 0001 Entire Facility - Entire Facility

- 212 [40 CFR 70.6(c)(5)(iv)] Submit Title V compliance certification: Due annually, by the 31st of March. Submit to the Office of Environmental Compliance, Surveillance Division. [40 CFR 70.6(c)(5)(iv)]
- Energy Arkansas, Inc.'s Ouachita Power Generating Plant shall secure one allowance for each ton of SO2 emitted per year. At the end of the year, each used allowance is retired and cannot be used again. EPA will record allowance transfers that are used for compliance and ensure that Ouachita Power Generating Plant's emissions do not exceed the number of allowances it holds via the Allowance Tracking System (ATS). See Subparts C & D of part 73. [40 CFR 72.9(c)(1)(i)]
- Emissions of smoke which pass onto or across a public road and create a traffic hazard by impairment of visibility as defined in LAC 33:III.111 or intensify an existing traffic hazard condition are prohibited.
- Emissions of particulate matter which pass onto or across a public road and create a traffic hazard by impairment of visibility or intensify an existing traffic hazard condition are prohibited.
- Maintain best practical housekeeping and maintenance practices at the highest possible standards to reduce the quantity of organic compounds emissions. Good housekeeping shall include, but not be limited to, the practices listed in LAC 33:III.2113.A.1-5.
- Failure to pay the prescribed application fee or annual fee as provided herein, within 90 days after the due date, will constitute a violation of these regulations and shall subject the person to applicable enforcement actions under the Louisiana Environmental Quality Act including, but not limited to, revocation or suspension of the applicable permit, license, registration, or variance.
- Comply with the requirements of PSD-LA-651(M-1). This permit includes provisions of the Prevention of Significant Deterioration (PSD) review from Permit PSD-LA-651.
- Permittee shall comply with the Part 70 General Conditions as set forth in LAC 33:III.535 and the Louisiana General Conditions as set forth in LAC 33:III.537. [LAC 33:III.535, LAC 33:III.537]
- Activate the preplanned abatement strategy listed in LAC 33:III.5611. Table 5 when the administrative authority declares an Air Pollution Alert.
- Activate the preplanned strategy listed in LAC 33:III.5611. Table 6 when the administrative authority declares an Air Pollution Warning.
- Activate the preplanned abatement strategy listed in LAC 33:III.5611. Table 7 when the administrative authority declares an Air Pollution Emergency.
- Prepare standby plans for the reduction of emissions during periods of Air Pollution Alert, Air Pollution Warning and Air Pollution Emergency.
- Design standby plans to reduce or eliminate emissions in accordance with the objectives as set forth in LAC 33:III.5611. Tables 5, 6, and 7.
- Comply with the provisions in 40 CFR 68, except as specified in LAC 33:III.5901.
- Submit Emission Inventory (EI)/Annual Emissions Statement: Due annually, by the 31st of March for the period January 1 to December 31 of the previous year unless otherwise directed. Submit emission inventory data in the format specified by the Office of Environmental Assessment. Include all data applicable to the emissions source(s), as specified in LAC 33:III.919.A-D.